ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
COLLEGE OF SOCIAL SCIENCES AND HUMANITIES
DEPARTMENT OF LINGUISTICS AND PHILOLOGY

DOCUMENTATION OF TRADITIONAL IRON SMELTING IN TIGRAY: WITH SPECIAL EMPHASIS ON CROSS-MAKING IN MAEKONO (maʕiχono) VILLAGE AND AKSUM TOWN

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ADDIS ABABA

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A Thesis Presented to the School of Graduate Studies of Addis Ababa University in Partial Fulfillment of the Requirement of the Degree of Master of Arts in Language Documentation and Culture, Department of Linguistics and Philology

By: Dagnew Mache Asgede

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Institute of Humanities

Approved by Board of Examiners

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Advisor	Signature	Date
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Examiner	Signature	Date

Table of Contents

Contents **Pages**

List of Maps……..……..IV
List of Figures.....….IV
Glossary of Local (Ethiopian) Terms…….……VI
Acknowledgments……..…….....X
Abstract……..……...…….XI

CHAPTER ONE
1 GENERAL BACKGROUND OF THE STUDY…….……1
1.1 Introduction..... 1
1.2 Statement of the Problem..... 2
1.3 Objective of the Study 4
1.4 Methods of Data Collection and Analysis 5
1.4.1 Method of Data Collection..... 5
1.4.2 Research Approach/type 7
1.4.3 Sampling Method..... 7
1.5 Equipments for the Documentation 8
1.6 Scope of the Study 8
1.7 Significance of the Study..... 9
1.8 Field Experience……....9

CHAPTER TWO
2 REVIEWS OF RELATED LITERATURE AND CONCEPTUAL FRAMEWORK... 10
2.1 Conceptual Framework..... 10
2.2 Review of Related Literature 12
2.3 Historical Background of Metalwork in Aksum..... 15
2.3.1 Metal Work in Aksum 15
2.3.2 Expansion of Metalwork in Ethiopia 19

2.3.3 Sources of Raw Materials for Metalwork 20
2.3.4 Techniqes and Tools Used in Producing Traditional Metal Crafts..... 21
2.3.5 Types of Blacksmiths' Products 22
2.4 Cltural Functions of Metal Crafts 24
2.5 Obstacles for the Development of Metal Work in Aksum 25
2.5.1 Social and Economic Status as Obstacle 26
2.5.2 Politics as Obstacle 28

CHAPTER THREE

3 DESCRIPTION OF THE STUDY AREA.....31

3.1 Geographical Location of the Study Area 31
3.2 Description of the Study Sites..... 33
3.2.1 Maekono 35
3.2.1.1 Livelihood Basis of Maekono Community..... 36
3.2.1.2 Origin of Maekono Blacksmith Community 37
3.2.2 Aksum Town..... 39
3.3 Historical Background of Marginalization and Its Present Situation 40
3.4 The View of the Blacksmiths Toward Their Tradition..... 43
3.5 Status of the Blacksmiths..... 44

CHAPTER FOUR

4 DOCUMENTING THE ENTIRE PROCESS OF METALLIC CROSS-MAKING.....46

4.1 Techniques and Process of Producing Metal Crosses..... 46
4.1.1 Techniques of Fire Management 46
4.1.2 Process of Producing Crosses and Church Related Crafts..... 48

CHAPTER FIVE

5 DESCRIPTION OF TOOLS, RAW MATERIALS, AND METALLIC CROSSES' MARKET.....63

5.1 Description of Tools Used in Cross Production 63
5.2 Sources and Types of Raw Materials..... 70

5.3 Description of Some Church Related and Metallic Products 73
5.4 Marketing..... 76

CHAPTER SIX
6 SUMMARY, CONCLUSION AND RECOMMENDATIONS……..……...77
6.1 Summary……..77
6.2 Conclusion 78
6.3 Recommendation 80

Bibliography

Appendixes
Appendix A: List of Informants
Appendix B: Different Metallic Products
Appendix C: Types of Crosses
Appendix D: Some of the Focus Group Discussant
Appendix E: Other Selected Pictures

List of Maps

Figure 1 Administrative map of Tigray Region……..…….31
Figure 2 Administrative map of La'elay Maychew……32

List of Figures

Figure 3. The perforated part of the rock……..41
Figure 4. Process of boiling and filtering the wax……...…….50
Figure 5. The wax after removed from a dish…….…….....51
Figure 6. Reproduction of the design……...…….52
Figure 7. The design reproduced on the wax……...…….52
Figure 8. Comparative view of the original and the reproduced design……...53
Figure 9. Comparison of the cross on the left with the crafted wax in the right……...53
Figure 10. The final draft of the wax which will be coated into mud……...54
Figure 11. Materials used in the process of coating the designed wax…….55
Figure 12. View of a partially coated wax designed cross……55
Figure 13. A completely coved covered wax design……...…….56
Figure 14. The coated wax design and the handle from left to right……...…….56
Figure 15. Metallic raw materials and the clays hold in designs……..57
Figure 16. A free space where Ato Kassa carryout his activities…….....58
Figure 17. The charcoal scorching in the machine……...……58
Figure 18. The melting pot in the fired charcoal in the machine……...59
Figure 19. Casting the melted metal into the designed hot clay……...59
Figure 20. Cooling of the hot clay after casting the melted metal into it…….…….60
Figure 21. Crushing down the mud to free the coated metallic cross……...60
Figure 22. The newly produced cross and the handle……...……60
Figure 23. The fixing/ attaching/welding the handle to the cross……61
Figure 24. View of a processional cross after its parts are joined together……..61

Figure 25. Cleaning the crafted crass using water and lemon……..62
Figure 26. The furnace (machine)…….63
Figure 27. Combination pliers……..64
Figure 28. Metallic rod (file)…….……...64
Figure 29. Sand paper……...…65
Figure 30. A saw……...…65
Figure 31. Hammer……...……66
Figure 32. "Meferferi" (a small metallic used to void dirties from crosses)……...….66
Figure 33. "Mekretsi" (a small metallic hand drill used to sketch the design)……67
Figure34. The anvil……...……67
Figure 35. Ventilator…….68
Figure 36. A flat metallic dish (plate)……...……68
Figure 37. The pincers…….....68
Figure 38. The flat tin dish……...…….69
Figure 39. Melting pot…….....69
Figure 40. Part of the area from where soil exploit……..70
Figure 41. Scrap irons supplied during Saturday market in the town of Aksum……...71
Figure 42. Maria Theresa and other different coins……..….71
Figure 43. Ato Kassa is arranging the cattle dung……....72
Figure 44. Shikar, messager, and chew barud from left to right…….…..72
Figure 45. Some metal crafts in Brhane's handicraft shop……...73
Figure 46. Some old crafts of blacksmiths……73
Figure 47. Old neck rings……..74
Figure 48. Crosses…….74
Figure 49. Old crafts presented in shop……74
Figure 50. Different crosses at Brhane's shop……..75
Figure 51. Different processional crosses…….75
Figure 52. Crosses displayed for sale in some shops……76

Glossary of Local (Ethiopian) Terms

Local Terms in IPA	Terms in English
1. almәda	name of place (they trained others)
2. Aksum	an ancient town found northern part Tigray
3. brçɨk'o wәrәk'әt	sand paper
4. bsadʒ	combination pliers
5. çәrk'i	cloth
6. çәw barʊd	potassium nitrate
7. çik'a	mud
8. t͡ʃɨkar	borax
9. dɨsti	dish (pot)
10. fәrnnelo	metallic hearth
11. fʊrdʒa	furnace
12. gʊbagʊb	type of local metallic neck jewelry
13. gʊnbet	May
14. gʊt'әt	pincers
15. ħamlә	July
16. ħas'in	iron
17. ħawi	fire
18. ħɨdar	November
19. ħrkm	type of local metallic neck jewelry
20. kara	knife
21. kbri	melting pot
22. kbritat	melting pots
23. kәsәl	charcoal

24. kɨbri the melting pot
25. koħo rocky
26. kʊbo cattle dung
27. La’ʕɨlaj-Majçew name of place (district enfolds Aksum town and Maekono)
28. maj water
29. maj-koħo name of place found in Aksum town (water spring from rocky area)
30. maʃɨχen center
31. maʃɨχono name of place around Aksum
32. məbrəd metallic rod (file
33. mədoʃa hammer
34. məfərfəri a small metallic used to void dirties from crosses
35. məftʊħ key
36. məgaz saw
37. məndədi the hearth part of the machine
38. mərgəta ecclesiastic
39. məs’ɨrəri filtering device
40. məsfn anvil
41. məsfn the anvil
42. məsk’əl cross
43. məsk’əln məthazɨʔʊn cross and shaft (handling)
44. məʃrəfit basketry Ventilator
45. məssagər ammonium chloride
46. məthari maj water container
47. məthazi kəsəl charcoal container
48. məʒwəri handle of the machine
49. məχ’ʊlo ħas’in the flat tin dish

50. məχ'rəs'i	a small metallic hand drill used to sketch the design
51. mido	comp
52. mɨsbar	crushing down
53. mɨχʊlaʃ	polishing (cleaning)
54. mstɨχ'ɨχ'al	arranging (arrangement)
55. mt'baχ'	welding
56. mzħal	freezing
57. najti məsk'əl məthazi	the shaft of the reproduced cross
58. s'əfiħ ħas'in	a flat iron (plate)
59. s'ənas'ɨn	sistran (object used as musical instrument in Church)
60. s'əriru zdərəχ'ə smɨʃi	the wax after removed from a dish
61. s'ɨlat	covenants
62. s'əhafti	writers
63. ʃəχ'latat	clays
64. ʃɨfət	basketry
65. smɨʃi	wax
66. t'awʊla	flat wood (table)
67. t'af	type of Ethiopian indigenous crop
68. t'ɨlfi	embroidery
69. t'lsəm	type of metallic neck jewelry
70. tʊbo	the pump which draw air into the hearth
71. wəjna dɐga	moderate (climate condition)
72. zfəlħə ħas'in	the metal liquid
73. znədɨd	flaming
74. ztəχ'əbərə	coated

75. zχ’bər smɨʕi	a wax ready to be graved
76. ʔadi stəhafti	name of place (home of writers)
77. ʕajni	eye
78. ʔɨgritat	legs (stands) of the machine
79. ʔɨmni	stone
80. ʔɨti ztəsərħə məsk’əl	the newly produced cross
81. X’əmis	traditional women cloth

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Abstract

This paper deals with traditional cross-making in Aksum and Maekono (maʕɨχono). Traditional cross-making is one type of traditional metalwork in Ethiopia. Traditional metalwork is one type of artistic handicraft in Ethiopia. Ethiopian society produces different metallic material cultures by heating and melting metals into other objects which express Ethiopian historical value and artistic tradition. The tradition has been predominantly also practiced in Aksum since ancient times.

The lyrics of superlative development of metalwork in Aksum are the first event enforced the researcher to conduct this paper. Postulating the metalwork tradition is a leader into industrial development, this thesis argued that metalwork tradition in Aksum had been overlooked by Ethiopian scholars and under estimated by the mainstream society. Abandoning practicing the tradition by the blacksmiths is another issue which initiates the researcher to conduct the research. Therefore, it is high time to keep the tradition alive to the coming generation; the paper's main objective is to document the entire procedures of cross-making in Aksum and Maekono.

The thesis has strived to address the entire procedures and overall processes of traditional metalwork in special focus on cross-making tradition. The attitude of the mainstream society towards the traditional metalworkers is also another point the thesis focused on. Sources of raw materials, the government's role on alleviating problems encounter the blacksmiths and the status of the blacksmiths. The above objectives and research questions are explored using triangular methods: participant observation, interview and focus-group discussion.

The result of this research reveals that despite the long history of their tradition, members of blacksmiths in Aksum and its vicinities are not extracting iron from its ore; it does not exist. Instead, the metal workers use scrap metals. The tradition keeps still traditional where anyone could only see maintenance, modification and reproduction; there is no progress. Meanwhile, the result of this research represents the long and tiresome seven procedures of cross-making tradition. Moreover, the youth members of the community are reluctant to keep practicing their forebears' tradition. There is no formal intermarry between the blacksmiths and mainstream society. The research finding, therefore, indicates that the tradition in the study site is somewhat endangered while the origin of Maekono village in association with the tradition seeks further research.

CHAPTER ONE

1. General Background of the Study

1.1. Background of the Study

Aksum, the cradle of Ethiopian civilization is located in the northern part of Ethiopia 1024 Kms far from the capital city of Ethiopia, Addis Ababa. Having moderate climate, Aksum is located in the Central Administrative Zone of Tigray Region. The town is found at 2, 138 meters above sea level. Based on the data obtained from the Central Statistical Agency in 2005[1], Aksum has an estimated total population of 47, 320 of whom 20, 774 are male and 21,898 are female. 75% (Seventy five percent) of the population in the town is member of the Ethiopian Orthodox Church while the rest is adherent of Sunni Islam and Protestantism. But history remembers Aksum as the center of great civilization and a Christian marine trade power.

Since the dawn of civilization, the people who lived around Aksum are said to have been agriculturalists though there are few merchants. In addition to this, they used to engage in varieties of handicraft works such as metalwork, woodwork, weaving, pottery, and in some cases leather production/tannery as sources of income. An insignificant segment of the population derived its livelihood from employment in governmental and non-governmental sectors as to Ethiopian cultural heritage project and Tigray Tourism and Culture Commission Aksum Branch Office (200?: ND).

Today, handicraft represents one means of generating income for some people living around Aksum, and metalwork is one example of handicrafts in the area. Studies, especially archaeological discoveries indicate that metalwork in Ethiopia dates back to the ancient Aksumite period. For instance, Phillipson (1998: 56) said, “By the end of the third century [AD], the quantity of fine metalwork that was available [in Aksum] strongly suggests that local production was not only firmly established, but displayed great variety and skill.”

[1] GeoHive-Ethiopian Population Statistics: available at http://www.xist.org retrieved on October 10, 2010

Moreover, Pankhurst (2010) quoting the Portuguese priest Francisco Alvarez who visited Ethiopia in the 16th Century described two settlements of blacksmiths in Ethiopia:

> The first, situated a mile from Aksum, was at a 'very small village' consisting 'entirely of blacksmiths'. The other group of blacksmiths, which was located on the periphery of Emperor Lebna Dengel's camp in Shäwa, occupied 'a very big space', near the market square, and was as big as 'a large village'. (Pankhurst, 2010[2])

Pankhurst further explained that the assumption of Alvarez was that the blacksmiths who were living around Aksum were "stationary" while the blacksmiths who were living with the Emperor were "mobile" as per the interest of the Emperor.

Though the area which was described by Alvarez as a little village consisting entirely blacksmiths is undefined, Maekono (maʕiχono) (found 45 minutes walk from Aksum town) and Aksum town are the study sites of this thesis. Like other communities, Maekono and Aksum town communities are earning their major income from agriculture and trading. Blacksmithing also constitutes the communities means of earning income. This study concerns with the blacksmithing tradition in the village of Maekono Aksum town are selected as a site of this research because the researcher has been influenced by its historical Civilization and its long standing material culture like iron working.

1.2. Statement of the Problem

Blacksmithing is a skill which has great contribution in tourist attraction and economic development (OECD, 2005: 93[3]). By smelting iron and changing it into other material culture like crosses, jewelries/ornaments, tools for agricultural activities, weapons, vehicles, houses, etc., people significantly benefit from this occupation. While this is a general truth, in many parts of Ethiopia, blacksmiths were labeled pejoratively as "hyena man" or "evil eye" and suffer serious isolation from the mainstream society. And I guess Aksum is no exception.

[2] Pankhurst's Corner: A Brief History of Iron-Working in Ethiopia: Voluem 12: No 608: available at http://www.capitalethiopia.com retrieved on August 13, 2010)

[3] OECD is an abbreviation for Organization for Economic Co-operation and Development

In addition to this, traditional metalwork was overlooked by Ethiopian scholars. Moreover, the researcher believes due attention has not been given for blacksmiths and blacksmithing in rural parts of Ethiopia like Aksum**.** This could be inferred from the fact that even today, blacksmithing is not integrated into small and micro enterprises that have been given institutional support and promoted through government development policies and local initiatives. In this regard, except for iron works in urban areas, no attention has been accorded for rural blacksmithing communities and their occupation. The negative attitude towards blacksmith community from the mainstream society in many parts of Southern Ethiopia was described by Freeman and Alula Pankhurst in 2001. As to these authors, because of marginalization from mainstream society in many parts of the Southern Nations Nationalities and People of Ethiopia, the new generation is showing extreme reluctance to take up this occupation. Though the blacksmithing occupation is economically important for the rural community, it is facing double challenge: a challenge of being overwhelmed by fabricated tools and instruments; and neglect by a new generation. If the new generation is not willing to practice it as a viable tradition, sooner or later the occupation will die out. Therefore, I think that it is high time to carry out serious research that enables to document the practice of iron smelting with a view to preserving the indigenous knowledge embodied in it.

The purpose of the current study is, therefore, to contribute something in this regard. In the course of the study, the researcher tried to assess and document the entire process of iron smelting from raw material acquisition to the end product. Detailed data gathering pertaining to the skill and the socio-economic significance of ironwork has been carried out. In general, the researcher has decided to carry out study on blacksmithing tradition because of the following reasons:

1. blacksmithing is important for economic growth;
2. the blacksmiths are suffering from segregation by the dominant society;
3. the members of blacksmiths are abandoning practicing the practice; and
4. there is no any recent research held in digital documentation of blacksmiths and blacksmithing tradition in this area.

As a result, a number of research questions were raised and answered in the course of this study. Some of these questions were:

- Where do these communities find the tools, equipments and raw materials for the production of metal crafts?
- What steps and procedures are used to produce the various metallic crosses these communities produce?
- Do these blacksmiths use metalwork as their primary economic source or as supplementary one?
- Is blacksmithing a status or social position indicator?
- What is the attitude of the majority society towards blacksmithing communities?

1.3. Objective of the Study

General Objective:

The general objective of this study is to textually and digitally document and describe the process of ironwork among the blacksmithing community of Maekono (maʕiɬχono) village and Aksum town as well as assessing the attitude of the mainstream society towards ironwork and blacksmithing communities.

Specific Objectives of the Study

Specifically, the study has been aimed to:

- identify the sources of raw materials for metalwork among the Maekono and Aksum town blacksmithing communities;
- document the entire process of producing metallic crosses from raw material acquisition to finished product;
- identify and describe metallic crosses produced by the study communities;
- identify the attitude of the mainstream society of the area towards blacksmithing communities; examine the attitude of the current generation towards its ancestors tradition;

- finally, look into how the local authorities try to alleviate the problems facing the blacksmithing community; and to identify the endangerment level of the tradition and come up with recommendations to alleviate these problems.

1.4. Methods of Data Collection and Analysis

1.4.1. Method of Data Collection

The nature of this research is ethnographic or interpretive study; primary data is used for the analysis of the paper though some background information and review of related literature is adopted from secondary data. Observation, in-depth interview and focus group discussion methods, therefore, are employed to collect primary data.

A. Participant and Non-participant Observation

Observation, generally, is a method of data collection for ethnographic research which is more of qualitative study. Observation as to Marshal and Rossman (1989) is "The systematic description of events, behaviors, and artifacts in the social setting chosen for study." Besides, Erlandson and et al (1993) stated that observation enables the researcher to describe existing situations using the five senses, providing a "written photograph" of the situation under study. Observation as to many scholars like Seale (2003: 227-232), Miller and Brewer (2003: 213-216), and Gomm (2008) can be *participant* where the participants of the study are aware of the fact that they are being recorded for the purpose of a study or *non-participant* where the participants are not informed as they are being recorded.

Observation, in this research is held in two ways for two different parts of the community-the blacksmiths community and the mainstream society living around them. In the first case, the researcher used participant observation to study the blacksmithing community while it was engaged in every activity of blacksmithing. The researcher participated in process of cross-making tradition. Though I am not member of the community, I participated in all procedures of cross-making and shared the skills of the practice with the metalworkers in Aksum. The participants of this part of the community were informed that they have been observed for the purpose of the study. This helped the

researcher to make the method of data collection ethical and to open door to use other types of tools of data collection like in-depth interview and focus-group discussion.

In the second case, the researcher tried to observe the mainstream society living around Maekono (maʕiɬχono) and Aksum town to understand their attitude towards blacksmiths and blacksmithing. In few cases, the people were not informed as they have been observed, for the researcher suspected that they may not reveal their real attitude towards being blacksmith. This observation was held in different occasions like when people were talking sitting and/or walking together, and in other different cases like what they chatted when they saw a blacksmith.

B. In-depth Interview

In-depth interview is a method of data collection which aims at finding "extremely personal feelings and emotions" (Swami, 2000: 227). This method, therefore, has been used to search out some deep information regarding blacksmithing. In the study, elders and youth were interviewed to get some information related to blacksmiths and blacksmithing. In addition to this, interview was held with the local government officials (the Chairman of Tourism Office of Aksum Cluster as well as the Vise Chairman of Small and Micro Enterprises) in the community who were believed to have adequate information regarding the study at hand. This helped the researcher understand how far governmental and non-governmental organizations were treating blacksmiths and their tradition. Other civil servants were also interviewed regarding their feeling towards blacksmiths and ironwork tradition.

C. Focus-Group Discussion

The data recorded digitally was presented in sight of some members of the village on screen so that they were required to comment it. After watching the video, members of the community gave their comments as the data represents them. The issues of traditional metalwork like the segregation the metalworkers face with, the importance of the tradition on economic development and tourism attraction, why the tradition is getting down etc have been discussed by the focus group discussants. Their comments and

suggestions have been considered in the research. In addition to the members of the blacksmith community, souvenir owners, painters and civil servants were participated as discussant.

1.4.2. Research Approach/type

This research is a descriptive or fact-finding investigation with adequate interpretation. The paper presents a detail interpretation of data by giving objective meaning about the procedures of traditional cross-making practice. Thus, the data collected through the aforementioned tools is interpreted qualitatively. In other words, there is no statistical interpretation or quantitative approach in the data analysis part of the paper.

1.4.3. Sampling Method

This research is a case study; only one metalworker was purposively taken as a sample; the video and audio recording and annotation of the language aspect in ELAN software also is dependent on this key informant. Therefore, this part of the study is an extensive research on the selected family. The criterion for the selection of the family from the research area basically was also purposive. The metalworker's skill was one criterion. In addition to this, the qualities and varieties of crosses produced by the metalworker were other criterion. Moreover, the volunteer of the metalworker family to be recorded digitally was another big criterion.

For the script part of the research, traders, employees of different offices and other part of the community were taken as subject of the study purposively. Besides, elders from the blacksmiths were interviewed to share information about blacksmiths from their life experience which was crucial to investigate historical aspects of blacksmithing from different angles. The researcher approached members of the community whom believed that they could offer representative information. In this case, such interviewees were selected purposively.

1.5. Equipments for the Documentation

Photo, Video and Audio

Photo images were captured for the description of tools which were employed in the reproduction and reparation of metallic crosses and for the description of products of blacksmiths. Photos which designate the procedures of producing a cross are posted in the description of cross-making tradition. In additions to this, every blacksmithing procedure has been recorded which helped the researcher to document it digitally. It was also helpful to reconsider the processes of producing metallic crosses in the script description part of the study. The ethnographic video and audio which was annotated in ELAN was about 15 minutes though the researcher recorded more than two hours video. This is due to time and finance shortage to annotate and edit the data recorded digitally. An entirely speaker of the dialect of the study community understudy is made to narrate the edited video. Thus, the researcher annotated the informant's utterance.

1.6. Delimitations and Scope of the Study

Because of time and finance constraints the study could not describe all types of metal products in the study area. The jewelry making, producing agricultural tools, and weapons are not incorporated in this study. Thus, the study is limited only describing the process of producing metallic crosses by the traditional blacksmiths who used stamp wax. So as to make the research manageable, the researcher is mainly concerned with describing the process of processional cross-making. The processional crosses are taken as the subjects of the study looking at their high artistic and/or historic value in the area. In market, processional crosses are widely available than the other types of crosses. Hence, tourists took processional crosses away to abroad; the tradition of making these crosses is changing due course of time. Therefore, the traditional production procedures of these crosses need to be documented to protect them from death. Preserving this tradition, therefore, is important to let the coming generation note its ancestries' skill and tradition. The study also tried to capture the attitude of the mainstream society towards blacksmith and blacksmithing in general.

1.7. Significance of the Study

The researcher believes that this study will have the following significances:

1. it enhances knowledge of blacksmith and blacksmithing;
2. it helps to introduce the work and products of the blacksmith community to other people;
3. it initiates the community to continue its tradition in a well organized manner;
4. it helps other researchers to make comparative study with other smiths living in other parts of Ethiopia.
5. It serves as source for interested researchers in different disciplines such as anthropologists, linguistics, etc.

1.8. Field Experience

This paper is dependant of 35 days stay at field work. In this time duration, the researcher experienced several things which I think are important for other students planning to have field work. The challenges and their solutions I took are presented bellow.

- The first challenge I faced with was that I could not find people practicing the tradition in Maekono village. That was for most members of the village were abandoning the practice/moving to the town of Aksum and the two metalworkers who practice the tradition in the village were busy with harvesting their crops. To solve this, I fellow the immigrants of metalworkers to the town of Aksum and make my recordings there.

- The second challenge I experienced was that few people were not volunteer to be recorded. What I did was that I met other people. Besides, in some cases, I take only script note.

- The third problem was that I could not get back for second round field work; the study site was far from Addis Ababa, and I had time and finance limitations. Thus, I wrote the first draft being there; then, I collected other complimentary data. Therefore, things went that way in the session of my field work.

CHAPTER TWO

2. Review of Related Literature and Conceptual Framework

In this chapter, a review of general literature related to handcrafts in Ethiopian and specific works particularly dedicated to traditions of ironwork will be carried out. Before this, however, the researcher touches upon the conceptual frameworks with a view of providing some clarity pertaining to how important terms and concepts are defined and their meaning is consumed.

2.1. Conceptual Framework

Handicrafts are sub studies of material culture. Before the researcher defines material culture and handicrafts, it would be credible to define what culture is. Culture is something learned, transmitted, passed down from one generation to the next through face-to-face interaction mostly via language. In relation to this, Oswalt in Duranti defined culture as follows:

> In anthropology a culture is the learned and shared behavior patterns characteristic of a group of people. Your culture is learned from relatives and other members of your community as well as from various material forms such as books and television programs. You are not born with culture but with the ability to acquire it by such means as observation, imitation, and trial and error. (Duranti, 1997: 24)

Culture, therefore, is what is actually shared by a group of people with a common culture that may include historic costumes, crafts, special dishes and holiday traditions, and a smattering of language. In other words, it is the way of thinking and doing things of a particular community. Geertz cited in Griswold (2004: 10) defined culture as, "An historically transmitted pattern of meaning embodied in symbols, a system of inherited conceptions expressed in symbolic forms by means of which men communicate, perpetuate, and develop their knowledge about and attitudes towards life". Culture is a historic event which can tell us what a philosophy of a certain society was: it inherited by new generation from its ancestors.

As Scupin and DeCorse (2004: 231) sates, "**material culture** consists of the physical products of human society (ranging from weapons to clothing styles), whereas **nonmaterial culture** refers to the intangible products of human society (values, beliefs, and norms (*emphasis from the origin*))." Tangible culture which consists material expressions such as manuscripts, books, art objects or monuments and sites, or physical expressions, such as music, dance, drama and other performing arts and intangible culture which consists craft skills and techniques including those for ceramic, textile, lacquering, metalwork, etc, of high artistic and/or historic value, food, clothing and shelter, occupation, belief, yearly events, etc and folk performing arts are the two parts of culture.

Today there are many material cultures like tools, buildings, medicines, etc in the world. And metal products like crosses are instances of material culture or are examples of object culture. Object culture is "a socially meaningful expression that is audible, visible, tangible, or can be articulated" (Griswold 2004: 13). Though the objects of handicraft products are tangible culture, the way they produced is intangible culture. Both parts of culture are part of the current study in case of crosses and the techniques and knowledge which are employed to produce them in Maekono (maʕiχono) and the town of Aksum.

Handicrafts are important for tourist attraction, which significantly contribute to the economy of the local areas where the crafts are produced (OECD, 2005). According to the documents of OECD (2005: 103-104) handicrafts will be more competitive in the glob if they are reproduced and updated incorporating the references and knowledge of the community. Handicrafts like metal products should undergo constant adjustments to reflect improved expertise and changes in tastes (OECD, 2005). However, the intangible values and meaning can be destroyed when the original setting of the crafts (original location, social context, and age of the asset) is not recorded (McKercher and Cros, 2002: 70). Therefore, the entire process of making crosses and the technologies and raw materials employed must be recorded. The manufacture's mark or name, signature and date of production are important to be documented with crafts. Documenting the technologies and raw materials used for its production and the participants and the setting in which the crosses are produced in Aksum is one part of the current research.

2.2. Review of Related Literature

The superlative assortment of Ethiopian culture, an ethnic and cultural diversity which has given enormous unique and dynamic visual culture is described by Silverman (1999: 3) as "traditions that are virtually unknown to the rest of the world". These traditions are not well researched (*Ibid).* As a result of this, questions like what are the cultural significances of those traditions; who made these traditions; how these traditions were created; in what setting can one cultural tradition created/made; what mental knowledge and object technologies are employed , etc are not yet well addressed (Silverman, 1999). Thus, this study has its own contribution on addressing the aforementioned questions in case of Aksum.

The literature on the traditional handicrafts in Ethiopia is inadequate and fragmented. Moreover, literature on traditional metalwork is extremely scanty and is not inimitable to other types of traditions rather it is less investigated compared to other crafts like painting, pottery, weaving, etc. I realized this from the reference materials available in the library of Institute of Ethiopian Studies at Addis Ababa University and Aksumite Heritage Foundation Library in Aksum town where there are no much independent works of metalwork tradition compared with the other aforementioned handicraft types.

Regardless their entire quality and quantity, most available works on Ethiopian traditional metalwork are disorganized and fragmented; most works, except few, Ethiopian traditional metalwork have not got an independent space. They are merged with other field of studies like Archaeology, Beliefs and Tradition, History, etc which is an indicator for the fact that metalwork tradition in Ethiopia is not given much emphasis by scholars, especially Ethiopian scholars. Because of time and financial constraints, the researcher's library work (assessment) is limited to works conducted on metalwork lodged in the library of the Institution of Ethiopian Studies at Addis Ababa University and Aksumite Heritage Foundation Library in Aksum town. Thus, the researcher is grateful to acknowledge scholars for their work on Ethiopian traditional metalwork. Below, the researcher will try to present the content of these works as comprehensively as possible.

Freeman and A. Pankhurst (2001), with their many co-researchers, conducted a comparative study among craft workers in Southern Nation, Nationalities and People of Ethiopia. They described the life of each artisan groups. Pottery, weaving, basketry, smiths, woodworkers and leatherworks are some of the craft workers assessed in their study. Freeman and A. Pankhurst (2001) described metalwork and metal workers neatly. According to these scholars, smiths' sources of raw material mainly are scrap of metals which they purchase from market. Smiths can smelt either individually or in a group; they can produce crafts to be sold or repair farmers' old agricultural and household tools (*Ibid*). An interesting conclusion Freeman and A. Pankhurst (2001) agreed on is the status of smiths can vary from village to village with in the southern region of Ethiopia though there is no or rarely intermarriage between blacksmiths and the mainstream society. The study of Freeman and A. Pankhurst (2001) is mainly different from the present study for my study's setting is northern part of Ethiopia, Tigray specifically Aksum. In the current study, beyond the inclusive description of the process how crosses produced in script, it is presented digitally which the researcher could not see in the study of the above scholars.

In addition to the above scholars, Karsten (1972) assessed the economics of handicrafts of Sidamo and Gemu Goffa (southern Ethiopia). To him most of the blacksmiths in these areas were not allowed to own land or own little land and are obligated to rent farm land to earn food for their family. Their products are used for agricultural activities, household implements, weapons and personal adornment by the community. The blacksmiths work their deed in a hut which mostly located a little distance from their house. Similarly, the marketing, economic and social aspects Aksum smiths in present situations are the core points discussed in the current study.

Todd (1975) states the total political and social status and social aspect of the Dimam craft workers. To Todd (1975), craft workers were considered as minority, and they were not allowed to own land or in rare cases they may own little land. They were exploited by Amhara farmers so that the craft workers should serve the Amhara farmers in producing handicrafts and delivering their babies (Ibid). Todd (1975: 59) added, "Members of a caste is by birth, and cannot be lost, except by leaving Dimam, or becoming the servant

of an Amhara." If they became a member of Amhara they will serve Amhara's farmers but there may not be much segregation as they were in Dimam. The Amhara farmers, however, were not isolated the blacksmiths rather they believed they are equal with other members of the community. The farmers allowed the blacksmiths to eat, share everything and enter farmers' house. Beyond segregation from the mainstream society, as Todd (1975) described, there was level of status even among the craft workers. Todd (1975, 59) said, "Among the Dime there are seven 'casts' which vary greatly in size. They are all ranked, in an order which depends on considerations of purity, no-purity, and impurity." The chief and priest casts are pure; commoners are non-pure; and ritual servants, hunters, smiths, and tanners are impure. What a PHD thesis by Todd does not touched upon is not only Tigreans craft workers but also the description of processes how to make traditional crafts which is the main focus of my current thesis.

In his book entitled 'Tradition of the Ethiopian Jews', Qes Asres (1995) describes as men work as blacksmiths, weavers, tailors, carpenters, masons, and tenant farmers while their wives help in keeping their children and sometimes engaged in pottery work. Qes Asres's book (1995) differs from my present MA thesis by the setting; the contemporary thesis dealt only on blacksmiths around Aksum irrelevant whether they are Jews or not.

As Klemm (2000: 16), Harari silversmiths, influenced by Yemeni and Indian styles, create complex silver jewelry for women. In this paper, I tried to investigate wether the metalwork tradition in Aksum is influenced by foreign culture or not Klemm (2002) states the metal jewelries were status indicator among the Afran Qallo Oromo in Eastern Hararghe as decorative means among females. In the current MA thesis, I tried to describe how the jewelries which produced by traditional metalworkers in Maekono (maʕiɬχono) and the town of Aksum state the status of the community in different angles like sex, age, and wealth. Tiquabo (2009) states as Ashenda girls of Tigray use different metallic jewelries as decorative in the ceremony. Syntayehu (2010) also states as hand woven clothes in Ethiopia has status indication of sex, age etc which also proved in Kutaber of Amhara community by Zufan (2010). Many other papers presented in different podiums by different cultural associations and research centers have been cited in the following subtopics of this chapter. Having said this much related to previous

works, the researcher presents some historical backgrounds of traditional metalwork in the following section.

2.3. Historical Background of Metalwork in Aksum

2.3.1. Metalwork in Aksum

Iron smelting in Aksum has been attracting many scholars from different parts of the world since 15th C to present time. Nevertheless, its origin remains controversial (Anfray, 1981). This can be associated with cultural and language development of Semitic civilization about its origin in Ethiopia on which scholars formulate different hypothesizes (as Syntayehu, 2010 coupled Semitic civilizations with the controversial history and origin of weaving on which he conducted MA thesis in Addis Ababa University). In respect to metalwork in Ethiopia, the few and fragmented available literature can be categorized into two: in one case, those scholars who assume as metalwork in Ethiopia is home-grown though there are few imported raw materials and technologies, and those scholars who advocate metalwork tradition in Ethiopia with little modifications is imported from outsiders in the other.

Unless it is giving highlight on what few scholars said about origin of metalwork tradition in Aksum depending on their archaeological excavations, it is difficult to generalize whether metalwork is indigenous or foreign to Aksum and/or to Ethiopia. This is true as Anfray (1981: 377) said, “The main task ahead is to determine what comes from external influence and what is really indigenous: like other civilizations, that Aksum is the result of an evolutionary process aided by geographic conditions and historical circumstances.”

To Anfray, Aksumite Kingdom had external relationship with many countries; it is expected that the culture of the ancient kingdoms of Aksum is influenced by foreigners. Though Anfray (1981) mentioned as the civilization of Aksum owes its own qualities to its origin of development in Africa, he suggested that five centuries before our era Arabians influence Aksumite civilizations of handicrafts like metalwork and language in northern Ethiopia.

Mentioning metalwork was extended in many part of Ethiopia in the third century (A. D.), Phillipson (1998: 56) noted as metalwork and its technology in Aksum was originated pre-dates the stated time. In strengthening this idea, Wainwright (1945: 18) in Simoons (1960: 178) declared, "It has been suggested that iron may first have been introduced to northern Ethiopia by Egyptian mercenaries in the third century B. C." From these scholars work, it may not be exaggeration to infer a clue as metalwork in Aksum dates back to early times (as Rodolfo (1977: 15) also mentioned that during C 600 BC – 100 A. D. iron was introduced into Aksum). In Ethiopia, the tradition is first introduced to northern part of Ethiopia though most scholars exclude the tradition of metalwork in the nomadic or non-agrarian parts of the nation. Further, it is necessary to abridgment some authors' quotes. Simoons wore:

> Despite the general deficiency of Ethiopian craft work, the Amharic and Tigrinya-speaking peoples have limited craft tradition that is superior to those of the Negro and Cushitic-speaking groups of the country. They not only produce a higher grade of silverwork, jewelry various kinds and silver crosses, but they are the only groups which elaborate church paintings, which appear to be of Byzantine inspiration. Much of the best work has been done in the centers of political authority, where nobles and kings have encouraged church painting through their endowments, and have supported court artisans, both native and foreign, so as to enable them to create articles of quality befitting the station of their masters. (Simoons, 1960: 174)

To Simoons (1960) the higher quality of silver made jewelries and crosses were produced in northern part of Ethiopia. But this indicates only for the quality of the metal products by then. Though Phillipson (1998) and Wainwright (1945) support the origin of metalwork in Ethiopia is Aksum, I am not confident enough on this generalization. This is for the nomadic parts of Ethiopian community tradition of metal products are excluded in most of previous works. However, many scholars wrote as Aksum was a center of metalwork tradition. In strengthening this idea Simoons again wrote:

> The traditional center of silverworking in Ethiopia is Aksum, the political and religious heart of the ancient northern Ethiopian state. Its pre-eminence in silverworking was probably encouraged by the presence there of foreign silversmiths who were brought in to work for the kings and lords of the country. Following the decline of the Axumite Empire, the city maintained its position in silverworking because of its prestige as a center of Christianity, though in recent years the new capital, Addis Ababa, has become a major rival. (Simoons, 1960: 177)

To Simoons, metalwork in northern Ethiopia directly or indirectly is influenced by foreigners' technology though everything may not be imported. Since Aksum were the head quarter of most ancient kings in Ethiopia, foreigners came to that city to visit the kings and share knowledge of different issues including metalwork tradition (*Ibid*). Aksum became well developed in metalwork and other arts which everybody couldn't diverge. But this may not be the fact which can guide anybody into a generalization whether metalwork in Ethiopia is first introduced or originated in northern part of Ethiopia unless exclusive study of nomadic communities' metal products like spear is integrated. However, for several archaeological excavations have been conducting in northern part of Ethiopia, the scholars deeply wrote history of ironwork in relation to ancient Aksumite civilization. In strengthening this idea, Phillipson noted:

> Aksum, with its trading network through the port of Adulis and its convenient situation between the Marab and Takaze rivers, was thus linked into the commerce served by the Red Sea route and land routes to the west, through which cultural, religious and material influences could enter the country. (Phillipson, 1989: 8)

To Phillipson the trading network between abroad kingdoms and ancient Aksumite kingdoms had cultural and material influences on Aksum civilization. However, the researcher completely do not ingest that abroad culture only had positive consequence on the development of Aksumite civilization but the Aksumite civilization also might had great contribution over the development of abroad culture and civilization. The civilization might be gone out from Ethiopia. The researcher, however, does not neglect that the civilization of ancient Aksumite might be influenced by the other culture and philosophies though not dominated.

Since external and internal exchange of goods needs currency as a medium of exchange, Aksumite kingdom was famous in Africa by producing its own coins (Kobishanov, 1981). In it's hey days, Aksumite kingdom was using different objects as money. Ivory, bronze, silver and gold were used as money in Aksumite civilization starting from third century A. D. In relation to this, Kobishanov (1981: 386) stated, "The position held by the Aksum Kingdom in world commerce was that of a first-rate trading power, as evidenced by the minting of its own gold, silver and copper coinage." Loundin (1986: 659) added as the first coins in Africa were made between the fourth and the sixth

centuries A. D. in Aksum. Therefore, it is possible to infer that metalwork and its tradition was historically rooted in Aksumite tradition. In other words, it would not be controversial as metalwork in Aksum traces back to ancient times. Beyond commerce related functions, metal products were used for agricultural activities and different other arts like building masons in the ancient times. In relation to this Kobishanov wrote:

> The crafts and trades of blacksmiths and other metal-workers, potters, buildings, stone-masons and carves, among others, attained a very high level of skill and artistry. The most important technical innovations use the use of iron tools, which became for more widespread than in the first millennium before our development of agriculture, trades and military science. (Kobishanov, 1981: 383)

Kobishanov (1981) explains blacksmiths in northern part of Ethiopia were producing material cultures like metal tools used for agricultural activities, weapons, and for technological aspects like building house and producing other cultural woodcrafts. And this makes the people of ancient Aksum were skilled than the other part of the community in Ethiopia by producing different agricultural tools nevertheless they acquired the skill from abroad or not. This people more or less were integrated with better technologies of metalwork comparing with other parts of Ethiopia (Simoons, 1960). However, it does not mean it is first originated at Aksum rather it is to signify the tradition was well developed in Aksum. Some archaeological excavations in and around Aksum witnessed that there were agricultural tools produced by the artisans of those early days. What is interesting about these early metal products is that most of them are similar to today's metal tools both in appearance and function as Phillipson wrote:

> An iron sickle or reaping hook was recovered on 1974 from a tomb in the Gudit Stelae Field at Aksum which probably dates to the third century AD or thereabouts. It is remarkably similar to those used locally today. Several copper alloy sickles come from Hawelti and from burials at Yeha which probably date to a significantly earlier period. (Phillipson, 1998: 62)

Depending on the archaeological excavations which excessively conducted northern part of Ethiopia, Aksumite civilization is famous in metalwork. The excavations made by different scholars confirm that the technologies and products of ancient Aksumite metalwork are similar with today. Phillipson added that technologies of traditional metalwork in Aksum were local. Phillipson (2003: 11) stated, "…. Metalwork was likewise mainly local: techniques employed, in addition to the basic smelting and forging,

included welding, riveting, production of even-thickness plates, drilling, perforating, casting, polishing, plating (including both annealing and mercury gilding), and enameling." Having said this much about the origin of metalwork in and around Aksum which dates back to the 3rd C, historical flourishing of the tradition has got a room in the following few paragraphs.

2.3.2. Expansion of Metalwork in Ethiopia

Though scholars like Phillipson (1998: 56) mentioned that at the end of the third century ironwork in Aksum was expanded, the direction of its expansion is not well defined. Besides, most scholars who devoted their time studying traditional metalwork in Ethiopia relate its expansion with its origin which they believe. Thus, several scholars who studied on traditional metalwork in Tigray and even in Ethiopia give emphasis that the tradition of metalwork in Ethiopia is started northern part of Ethiopia and then expanded south wards. However, there are some scholars who advocate metalwork was started in the southwest Ethiopia which influenced by Meroitic civilization which concurred by Aksumite kings and expanded to other part of the nation as Todd cited in Haaland and Shinnie (1985) stated.

Though there is imminent situation that the expansion of metalwork may be from other parts of Ethiopia to north, many archaeologists comment that the expansion is from north to south. In relation to this Simoons writes:

> It appears likely that silverworking skills were introduced to northwestern Ethiopia in fairly recent times from Aksum, for neither the Agow-speaking people nor the Negroes of the region know these skills and even today the majority of the silverworking have learned, or claim to have learned, their trade in Aksum. (Simoons, 1960: 177-178)

Generally, it has been claimed that metalwork in Ethiopia is well developed in the Semitic language speaking people like Tigreans and Amharas. It is from this part of the nation metalwork expanded to the other part of the nation. In addition to this, it has been mentioned as agriculture is first used in the northern part of Ethiopia thereby they invented to use metal products for agricultural activities. And the first metal products were used for agricultural purposes replacing stone and wood craft tools. But upcoming

archaeological excavations and finding may disprove this generalization for nomadic or non-agrarian communities in Ethiopia were also famous using metallic head spears and other metallic equipments. Hence, scholars may hypothesize that the expansion of traditional metalwork is from the nomadic communities to the other part of the nation. By the course of time the research is conducted, however, the researcher is persuaded that the expansion of developed metalwork technology is from north to south. This is real for the technologies of traditional metalwork used in ancient Aksumite were well developed as mentioned by Phillipson (1998).

The traditional practice needs raw materials. Comparing with the issues stated above, raw materials and their source are not much controversial. However, there is a little controversy as some raw materials were imported or not in ancient times. Thus, these issues will be discussed in the underneath section.

2.3.3. Sources of Raw Materials for Metalwork

The sources of raw materials for Ethiopian smiths can be categorized into two: the raw materials which imported from abroad on one hand; and the raw materials produced by the local people (by the main stream society or by the smiths) or purchased from other regions within the country on the other. In relation to the historical sources of raw materials for traditional metalwork in Ethiopia, Simoons (1960: 179) argued that there were numerous small iron mines and a small-scale regional trade of iron ore in Ethiopia. Pearce (1831, II: 202-3) in Simoons (1960: 179) stated that mountains of Begemder were full of iron mines. He added that iron stone was plentiful in all parts of the country, especially in Godjam, Wojjerat, Salora, and Bora. This is an indication as local iron ore extracting in Ethiopia was common in the early times and smiths were using local technologies. The smiths were able to extract the raw material from soil and produce metal crafts for different purpose of their daily activities.

Even in the northern part of Ethiopia there were iron ore extracting as R. Pankhurst (1961) in Munro-Hay (1991: 172) said, “Sources of iron ore were apparently fairly common in Tigray ….though tin was apparently available later times.” Since local extracting of iron ore in Ethiopia is not well documented, many scholars thought that

metal ores were imported from abroad and sometimes from the local areas. In strengthening this, Munro-Hay (1991) citing Connah (1987) and R. Pankhurst (1961) wrote:

> Local exploitation of mineral resources is not well documented, but gold seems to have come from the Sudan (Sasu), some southern Ethiopian regions and possibly Gojjam, Eritrea, and the Beja County, and iron ore, silver, lead and tin are also mentioned, though mostly from Portuguese sources… (Munro-Hay, 1991: 171)

Therefore, raw materials were either imported from abroad and other regions of the nation or locally mined. Because of the domination of iron scraps of European technologies, iron ore extracting has been band before several years. Before half of a century, Simoons (1960: 179) said that, "Today blacksmiths no longer obtained their iron from domestic deposits, but instead use scrap iron, which they buy in the local market places."

In the recent times, therefore, extracting of iron ore from its original ore is getting down for the domination of metal scraps over the traditional means of iron ore extracting. Smiths purchase raw materials like scrap metals and charcoal from market. They are either obligated to travel long distances to get the scrap iron with fair price, or they have to purchase expensively from other merchants who brought it from other areas like Addis Ababa. As Freeman and A. Pankhurst (2001) noted most smiths of southern region of Ethiopia purchase different scrap of iron from market; either they purchase from market or produce charcoal by themselves.

On the other hand, those smiths who produce jewelry crafts need raw materials like gold, silver, bronze, etc. Those smiths mostly used Maria Theresa coins as Klemm (2002: 79) stated that Eastern Hararghe smiths were using it as sources for their jewelry production. By reshaping and reproducing the scrap irons and other sources of raw materials, the blacksmiths produce different metal products which will be discussed in the next section.

2.3.4. Techniques and Tools Used in Producing Traditional Metal Crafts

Though the technology implemented in metalwork in ancient times is not well investigated, some remarkable designs crosses in most coins of ancient Aksumite

civilization and their gliding processes were examples of remarkable indigenous metalwork technologies. These technologies are indigenous to Ethiopia for the ancient Aksumite's kings were famous in producing and decorating coins. The design of crosses and the kings' picture made on the coins were remarkable. And this helps assuring that such designs and decorations were originated in Ethiopia. In relation to this, Phillipson stated:

> A remarkable technological feature of the Aksumite coinage is the presence of localized gilding on several silver and copper issues as a means of accentuating sections of the design such as parts of the cross when used as a reverse type, or the crown on a royal portrait. On the earliest examples of gold foil seems to have been applied during the striking process; subsequently a gold-amalgam firing technique was employed after striking. The methods used have not been investigated in detail, but were evidently extremely effective for the gliding appears to have been a standardized feature of certain coinage issues and one which has only rarely been obliterated through the passage of time. So far as is known, no other coins anywhere in the world have ever employed localized gilding in this way (Phillipson, 1998: 73).

Besides, Karsten (1968, 6) mentioned that Sidamo and Gamu Gofa handcrafters are examples of people who use primitive materials. This author also mentioned that two bellows, three or four anvils, one or two pliers, two chisels, and one metal file are the most important materials for traditional metalworking in southern Ethiopia. Karsten (1972) added that most blacksmiths in Sidamo and Gamu work their work in hut whose roof rests on a few poles. Moreover, they have no walls and nothing blocks the air to move in. There are rare cases where blacksmiths work in group; however, most blacksmiths in southern Ethiopia work individually as mentioned by Freeman and A. Pankhurst (2001). He also added that the metal raw materials are heated till they get easy to be flexible and elastic to take different structures as per the design of the craft worker. The tools and technologies used by the traditional blacksmiths of Aksum while producing traditional crosses is discussed in the current paper. In the following section, different types of products which produced by traditional metalworkers in different part of Ethiopia are discussed.

2.3.5. Types of Blacksmiths' Products

As witnessed from the available literature on traditional metalwork in Tigray, metal products can generally be categorized into two: tools used for agricultural activities,

weapons, and some house hold equipments in one hand, and jewelries used for personal adornment and their containers and some decorative house hold equipments in the other (Munro-Hay, 1991). On this classification of ancient metal products, Munro-Hay (1991: 240-242) categorized the metal products used by the Aksumites into two. Munro-Hay's first category of metal craft used by ancient Aksumite community is "… of luxury, such as jewelry, costly boxes, small decorative objects, bowls, and figures in the round appear in gold, silver and bronze, or combinations of these metals." The second category of metal crafts used in the afro-mentioned community as Munro-Hay (1991) contains "…the tools, weapons, and other objects in iron like sickles, knives, chisels, saws, axes, tweezers, hinges, spears and arrow heads, hooks, and other unidentifiable….."

Crosses are part of the blacksmiths products produced locally in Aksum and its environs. How crosses are produced in and around Aksum is the main focus of my current MA thesis. Supporting as crosses has been part of traditional metalwork in and around Aksum, Ethiopian Cultural Heritage Project in cooperation with Tigray Tourism and Culture Commission Aksum Branch Office said:

> Materials used for church service were especially carefully crafted. The cross, the censer, the vessel and spoon used during communion, the prayer staff, the book stand (atranos) etc were made from metal ranging from brass and bronze through silver to gold. The seat for a replica of the Ark of the Covenant (menbere tabot) sometimes also made from metal. (200?: 41, ND)

The office explains about equipments used at a church were crafted by the local blacksmiths who were living in Aksum and its vicinities. The blacksmiths gave much emphasis for the complicated design and crafting the metallic products. The office (200?, 40-41) also mentioned weapons like spreads, swords, daggers and knives made up from iron were used during military campaigns while tools like 'the plough, the hoe, and the sickle were used for agricultural activities. On the other case, Karsten (1968: 6) stated that a large variety of Sidamo and Gamu Gofa provinces of southern Ethiopia blacksmith products is used in household and in farming. these products were produced by the traditional metalworkers being in stressed and isolated from the mainstream society. Therefore, it is very crucial to discuss several aspects which hinder the development of Ethiopian traditional metalwork in the upcoming section.

2.4. Cultural Functions of Metal Crafts

Metal crafts are material cultures used as tools in different activities of the society and as personal adornment and household materials. Thus, metal crafts are used in the society in different aspects and help to display the cultural philosophy of the community where the handicrafts made in (Tiquabo, 2009). Zufan (2010) also states as Amhara women wear 'Melgom' tailed in to 'Kemis' which is a traditional Ethiopian woman dress.

Karsten (1968) mentioned that in Sidamo and Gamu of southern Ethiopia the tools of metal craft and their products show characteristic differences for each tribe. This is a way determined as the metal crafts are produced and used per the interest of the community within which the metal crafts are produced and worn. In other cases, metal crafts can state observers the age, social status, wealth status, and ancestral group of the users of the metal products (Klemm (2002). Klemm (2002: 78-79) citing Paulischke (188a: 69) noted, "…While upper class women owned a great deal of silver, they wore only one or two silver bracelets of Arabic design, since the excess of jewelry types worn by Oromo women is not considered as appropriate aesthetic among Harari women." Atakelty, in a paper "Aksumite Tradition and Social Life" (200?, 42) wrote, "Women wear different types of dresses, shawls, and jewelry that are appropriate to their age and to their station in life embossed leather." Therefore, some of the metallic handicrafts are status indicators and have cultural meanings. Atakelty (200?: 42) added, "There are many handicraft products that are specifically made for weddings. From the engagement on, Maria Theresa coins pendants marda miranqua, earrings, walaba reisi amulets (albo igri) and bracelets made from copper, silver and sometimes gold."

Women who are married can simply be identified from the non-engaged women by the handicrafts they wore. The age of a person can be guessed (approximately correct guessing) depending on the handicrafts they put on. In the current study, the researcher investigates how the current metallic crosses produced by Maekono (maʕiɬχono) and the town of Aksum blacksmith communities indicate age, sex, status and position of both sexes.

2.5. Obstacles for the Development of Metalwork in Aksum

The highly developed tradition of metalwork has been derived back by different reasons which are discussed below. Testimonials for the segregation of blacksmiths in the heydays can be supported as R. Pankhurst (2010) noted that in the third C (AD) there was isolated little village which contains entirely blacksmiths around Aksum (please see 1.1). This tells as the blacksmiths by then were living isolated from the dominant society. In strengthening this idea A. Pankhurst noted:

> Throughout Ethiopia there are minority groups of craft workers and hunters that are excluded from mainstream society. The marginalisation of these groups is not a new or localised phenomenon. It occurs in the north and the south, in towns and in the countryside, in the past and in the present. (Freeman and A. Pankhurst, 2001: 1)

In Ethiopia there are several groups of craft workers society. Those parts of the society have been suffering from segregation by the dominant society. Depending on the crafts the minority groups produce, they have been named differently. For example, group of society who produce iron crafts are "buda" as Finneran (2009[4]). Marginalization of these groups is true in the entire of Ethiopia. However, the degree of segregation may vary from area to area as Freeman in Freeman and A. Pankhurst (2001: 304-312). As an example, he stated that smiths in Yem and Gurage are not much segregated from the majority society comparing with blacksmiths of Oyda, Malo, Maale, Ari, Bako and Dime who are the most marginalized.

Though the artisans in some countries of Africa are motivated and looked up for they are skilled men, in Ethiopia it is opposite as Simoons (1960: 174) noted: "Unlike most people of rainforest Africa, who honor and respect craftsmen, Ethiopians, like Arabians, generally ignore or look down on many types of craftsmen, some of whom belong to despised classes or to ethnic minorities." Ethiopian society did not respect for the handicraft workers. However, Ethiopian community does not neglect all artisans equally. In some areas of the nation there are metalworkers who intermarry with the main stream

[4]Life Style: Ethiopian Evil Eye Belief and the Magical Symbolism of Iron-working: Lissan Magazine: available at http://lissanonline.com.mht retrieved on September 9, 2010

society. This is true as Simoons (1960: 174) stated that in some part of Amhara region silver workers intermarry with non-metalworkers.

Because of different reasons, the number of metalworkers and the culture are getting down. And till present, there is isolation of blacksmiths from the dominant society as to Finneran (2009). For a discussion on this research, the hindrances for the development of metalwork tradition are categorized in to three namely social, economic and political obstacles which are briefed in the next section.

2.5.1. Social and Economic Status as Obstacle

Blacksmiths in different part of Ethiopia have been socially isolated from the main stream society. In relation to this, Benzing in Fellner's collection of papers states:

> With on [*Sick: in*] the ethnic groups of Ethiopia, artisan minorities are marginalized and despised by the peasants in various ways: segregated residence, no inter-marriage, no food sharing, no physical contact. They are looked down upon and are generally considered impure, and, at the sometime, associated with forces which play a role in rituals. (Benzing, 2000: 17)

In different parts of Ethiopia, the social marginalization of blacksmiths is characterized by segregation and non-reciprocal relations (Benzing, 2000). As Freeman and A. Pankhurst (2001) noted that the minorities in southern part of Ethiopia are not expected to participate in most ceremonial activities and group works. However, they may rarely serve in few activities which the dominant farmers consider minor activities like digging burial and decorating some ceremonies. The mainstream society has a backward belief that blacksmiths eat human being and unclean meat at night for they changed into hyena. This has been stated by Simoons as follows:

> In most of Ethiopia, blacksmiths are feared as well as scorned. This fear is coupled with the belief that smiths posses supernatural powers, such as the ability to give the evil eye, to cause sickness, and to change themselves into the form of hyenas or other animals, and to attack and eat people. Because of this blacksmiths have often been persecuted in the past, and ones King Zara Yaik'ob (1434-68) went so far as to kill large numbers of them as sorcerers. (Beckingham and Huntingford, 1954: 55) the fear of blacksmiths finds expression today is terms which are commonly applied to them, such as t'ebib, literally 'one who has secret knowledge', and buda, ;a sorcerer' or 'evil spirit'. (Simoons, 1960: 180)

Thus the mainstream society thought the blacksmiths deny the regulation of the religion and culture of the community. For this reason, blacksmiths were not allowed to own land and even touch the non-blacksmiths crops. If blacksmiths touch crops of the mainstream society, they would be considered as criminal and must be sacrificed a cow. The cow blood sprinkled in the field or on the granary to remove pollution. If this is not done the crop cannot be eaten by any 'non-polluting' Dime as to Todd (1977: 11).

The mainstream society, therefore, had coupled backward views. The first one is that they thought the blacksmiths cause grains and crops dry. And the other one is that they thought blood of cow would cure the grains and crops from getting dry.

All these situations had rest economic impact on the blacksmiths community in different part of Ethiopia. In other words, the social isolation had impact in the economic capacity building of craft workers. They were not allowed to produce crops (south Ethiopia) and depend only on crafting which had not sufficient income (Karsten, 1968: 6).

This is for most metalworkers produce tools used for agricultural activities which is quite seasonal. The farmers also only need to renew their cultural tools seasonally. They only purchase one or two metallic products per year which hold back the blacksmiths from producing and selling excess products.

In the other case, they were not rewarded as their work deserved. In relation to this, Qes Asres (1995: 95) mentioned, "Those skilled at brick and masonry work often do forced labour. They construct churches or government buildings with minimal compensation." In case of metal workers who work in renewing and producing farmers agricultural products, they paid their salary at the end of the harvesting season (in case of north Ethiopia). This is true as Qes Asres (1995: 95-96) wrote, "Those who do farm work as tenant farmers get their share of the agricultural produce yearly from their landlords at the end of the harvesting season when they have completed reaping, gathering, and threshing the product."

All these realities had made the practice step back. Hence, metalworkers are obligated to immigrate to cities to get superior income and to interact with other people with no marginalization. This is as Benzing in Fellner's collections of papers wrote:

> They are denied access to land and live stock. A slight improvement of their situation took place due to two important changes: the seasonal migration to urban centers and industries allowed them to interact with people on a non-discriminatory basis, as well as to accumulate some wealth in comparison to the peasant in their home community; and, after 1974, they got access to peasant associations, to the army and militia. But 'discrimination in all its forms has not been abolished'… (Benzing, 2000: 17)

From this quote it is straightforward to understand the metalworkers who live in urban areas were not liberated segregation from the main stream society. The degree of isolation in the urban areas, however, is less than the rural once (Discrimination of artisans is less in cities than in rural areas.). The income of the artisans is more in urban than rural. Hence, the metalworkers migrate to cities to get more income and for their liberation not to be kept apart from the community around them (Benzing, 2000).

To sum up, the blacksmiths were face difficulties to own land and earning sufficient income; the mainstream community was isolating the crafts men and consider them impure. And this had correlation with the political conditions of most part of the nation in the pats time (see 2.4.2).

2.5.2. Politics as Obstacle

An internal and external political influence had also its own contribution in the isolation of Ethiopian metalworkers. Though it has been claimed that many Ethiopian kings had been appreciated handicraft workers, there were some who depress the development of traditional metalwork in Ethiopia. In relation to this, Emperor Zara Yaqob has been stated as king who daunts the developments of traditional metalworker in the nation. This is true as R. Pankhurst with a foreword by R. Panikkar (1961: 286) stated, "On one occasion the Emperor Zara Yaqob (1434-1468) was reported to have killed all the goldsmiths and blacksmiths-irrespective of their religion-believing them to be sorcerers." This is also stated by Simoons, (1960, 180) as, "…Because of this blacksmiths have often been

persecuted in the past, and ones King Zara Yaik'ob (1434-68) went so far as to kill large numbers of them as sorcerers."

Blacksmiths were responsible for a person's illness, without out any proof. Blacksmiths were even beaten by the relatives and neighbors of an ill person who did not cured by traditional drugs and holly waters. This is true as R. Pankhurst with a foreword by Panikkar (1961, 286) stated, "It was sufficient to think that a particular blacksmith was responsible for a person's illness; no proof was required; relatives and members of the public would at once threaten the unfortunate craftsman with death if the patient failed to recover."

It is to this extent the blacksmiths were segregated by leaders and novels of the area. But there are many nobles and leaders who encourage for the development of metalwork tradition in Ethiopia. Emperor Lebna Dengel was one who initiates metalworkers to extent he had group of metal workers who helped him in producing different crafts as mentioned by R. Pankhurst (2010)[5]. However, it has been claimed that handicraft workers were serving for the government they administrated by. This is also true as Qes Asres (1995, 95) argued, "Most of the handicraft works they do is for the government, for which they are paid compensation." Though the king was served by the blacksmiths for his purpose, the blacksmiths were not killed in the reign Emperor Lebna Dengel.

Besides the internal and local influences, metalwork tradition was also influenced by external forces as every development of Ethiopia is trucked. Local mining has been blocked down because of the Europeans' manufactured domination on the Ethiopian tradition of metalwork. It is the Europeans scrap iron which replaced the local mined raw materials. This is true as Simoons (1960: 179) citing Tax, Eiseley, Rouse, and Voegelin (1953: 18) said, "The shift of the use of scrap iron apparently has taken place since Italian times, when it first became abundant, and parallels the virtual disappearance of the indigenous iron-smelting industry throughout Africa under the impact of European trade." To Simoons (1960) importing of European metal production in different situations like trade and colonization had great influence in the death of local mining in Africa.

[5]Pankhurst's Corner: A Brief History of Iron-Working in Ethiopia: Voluem 12: No 608: available at http://www.capitalethiopia.com retrieved on August 13, 2010)

Though Ethiopia is free from colonization, the researcher could not see Ethiopia does not dominated by the externally produced scrap irons. Rather this had its own negative impact in the development of the local metalwork tradition.

In the above cited works, the origin of traditional metalwork, its expansion, sources of raw materials, the status of crafts, and the isolation of the blacksmiths in social, economic and political aspects in relation to different parts of Ethiopia have been discussed. Though there are few scholars who attempted to describe the current situation of crafts in southern part of Ethiopia, they had not document the entire process of producing crafts (the skill/wisdom of the craft workers) digitally. Ethiopian scholars had not given accordance to the traditional metalwork in Tigray regardless the archaeological excavations done in Aksum by foreigner archaeologists. However, these excavations do not tell us how the present metalworkers are producing their crafts in Aksum. Therefore, it is high time to describe and digitally document the entire procedures of traditional metallic-material culture (from raw material acquisition to the final product) thereby contribute to the development of literature of metalwork tradition in Aksum and its environs. Having this main objective, my thesis will have its own contribution in producing comparative studies of metalworker tradition in Ethiopia.

CHAPTER THREE

3. Description of the Study Area

3.1. Geographical Location of the Study Area

Aksum is under the Central Administration Zone of Tigray region which is bordered by Western Zone of Tigray in the west, Eritrea in the north, Eastern Zone of Tigray in the east, South Eastern Zone of Tigray in the south east, and Amhara region in the south directions. The town of Aksum is the seat of the Central Administrative Zone of Tigray and is an independent district though the town is geographically found in La'elay-Maychew (La'ʕilaj-Majçew) district. La'elay Maychew is encircled by Mereb-Leke, Naeder-Adet, Tahtay-Maychew, Adwa, and Werel-Leke districts in the northern, southern, western, eastern, and south western directions respectively. For further understanding take a look at the administrative map of Tigray below.

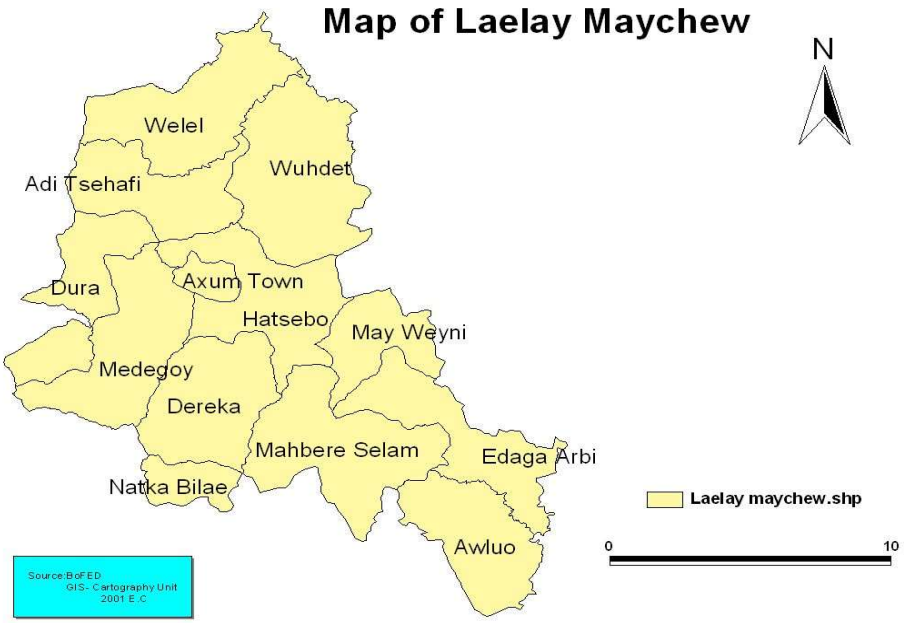
Figure 1. Administrative map of Tigray Region

Source: *Aksum Finance and Development Office*

While the district La'elay-Maychew (La'ʕilaj-Majçew) has 13 Tabias namely Awluo, Edaga Arbi, Mahbere Selam, Natka Bila'e, Dereka, Medegoy, May Weyni, Hatsebo,

Aksum, Dura, Adi Tsehafi, Wuhdet, and Welel, the town of Aksum contains four *"tabias"* called Hawelti, Hayelom, Kindeya, and Maebel in its administration. The town is bounded by *"tabia"* Hatsebo in northern, eastern, and southern and *"tabia"* Medegoy in western directions.

Figure 2 *Administrative map of Laelay Maychew*



Source: *Aksum Finance and Development Office*

Aksum is located at 14 ^{0} 07 $^{'N}$ latitude and 38^{0} 44' E longitude and 2138 Meters above Sea level (N. Metrological Service agency Mekelle Branch 1999 E.C). However, the highest elevation in the town reaches 2242 M above Sea level (Around E. Television Station, May-Qoho (maj koḥo)), while the lowest elevation is 2104 M above sea level (Around Fanos Detergent Factory, "Mayako"). Aksum has *Weyna Dega* (wəjna dḛga) climatic condition where the Average Maximum Temperature is 28.1 C^{0}, Max T. 29.8 C^{0} in the month of *Gunbet* (gʊnbet) 'May'; Average Minimum Temperature 10.9 C^{0}, Min T. 9.3 C^{0} in the month of *Hidar* (ḥɨdar) 'November'. According to the Northern Metrological Service Agency, Mekelle Branch (1999 E.C), the area has a Maximum

rainfall of 428.1 ML registered in the month of *Hamle* (ħamlə) 'July'. Its average rainfall, however, stands at 85.9 ML.

In Aksum, there are several tourist destinations like the Obelisks of Aksum, the St. Marry Zion Church, Aksum Museum, Aste Kaleb and G/meskel's Tomb, Queen Sheba's swimming pool, Gobedra, King Bazen's Tomb, Ezan Park, Adi Kilte (Old houses), Mai Shum, King Ezana's inscription, Abba Pentelion monastery, and Abba Libanos monastery. Apart from the above mentioned tourist sites, 160 km. distance far from Aksum, 50 historical, religious, natural sites and parks are identified as tourism attraction sites. As a result of this, the number of tourists inflow reached 40,388 (22, 356 local tourists and 18, 032 foreign tourists) and the income earned is 737, 124 birr (70, 392 birr from the local tourists and 666, 732 birr from foreigner tourists) in the year 2008; according to the Aksum Finance and Plan office, the above number indicates only those registered by the tourist information centers.

3.2. Description of the Study Sites

Aksum is a place where the ancient architecture of Ethiopia reached its zenith. It is also a cradle of Ethiopian's Christian faith, and an old town where many kings resided and ruled their empire. Aksum now is a storehouse of many excavated and unexcavated archaeological relics and culture (material and non-material culture) and is the study area of this research. In the districts of Aksum and La'elay-Maychew (La'ʕɨłaj-Majçew), there are many inhabitants who are skilled in iron smelting. Though it is difficult to have separate quarter that contains only blacksmiths in the town, it looks common in the vicinity of the town as Ato Gebretsadikan[6] shared me his knowledge of the area. For instance, Maekono (maʃɨχono), Adi-t'kana, and Aseba were the villages where blacksmiths exclusively lived according to Ato Kassa Tesfu[7] and Ato Gebretsadikan.

[6] Gebretsadikan (84 years old) was interviewed on December 3, 4, and 5, 2010 at his village. He is a member of Maekono community practicing traditional metalwork

[7] Kassa Tesfu (42 years old, grade 12 complete) was interviewed on December 7, 10, 21, 30, 2010 and January 1, 3, and 4, 2011. He too is a traditional metalwork in the town of Aksum village Hawelti; he is metalworker selected for the digital recording of the process of traditional cross making by melting down wax

The current study focuses on two separate sites; these sites are Maekono, which is a rural village found in northwest direction from the town, and the town of Aksum itself. These sites are separated by the mountainous area named Beta Giorgis[8] which has been claimed to be the first site where the town of Aksum had began its development and is also a place where the Ark of Covenant was found first according to Mulubrhan[9]. Historical villages like Hawelti, Maekono, and Adi-t'kana are found around Beta Giorgis. These villages were claimed to have entirely contained metalworkers as Kassa and Gebretsadikan confirm.

Regarding age and sex composition of the population in the study area, the children are students in the governmental schools found in the area. During their spare time, the students from the rural village help their families by herding livestock. In the town, however, the students help their parents keeping shops (if their family owned shops) unless they spent their time playing with friends, sometimes reading, and sale some handicrafts for tourists.

Sex composition of the study community is similar with the other part of the region. The females work in home activities like caring child, preparing food, and keeping shops when their husbands leave for some other business. However, there are females engaged in handicraft works like making cultural clothes and cultural household materials. They make *t'ilfi* 'embroidery' on *χ'emis* 'traditional women cloth'. Besides, they produce *fɨfet* 'basketry'. Women are not active participants metal works, woodwork, and leather works. These activities are considered much energy consuming and are only men's work. The men produce and sale these crafts for the local and foreign tourists. With a view to make clear things, brief description of the two sites, namely Maekono (maʕɨχono) and the town of Aksum presented in the following sections.

[8] It is a mountainous or Plateau area, where there is village which now contains farmers and many unexcavated archaeological sites as Mulubrhan mentioned

[9] **Mulubrhan** (29 years old, degree in History), who interviewed in December 20, 2010 at the museum of Hawelti in Aksum, is an Expert of Museum in Aksum

3.2.1. Maekono (maʕɨχono)

Maekono is located in the northwest of Beta Giorgis hill (please see 1.1 and 3.2). According to one of my informant, Hayali[10] (changed his name), the name Maekono is derived from Tigrigna word *maʕɨχen* 'an area where many people can take rest'. According to him, the village where anyone can take rest and visit was initially settled by wealthy and hospitable people. The above statement is also true when corroborated with Ato Godeffa Legesse[11] and Gebretsadikan's idea. Ato Godeffa who is a metalworker in the village of Hawelti confirmed that the name Maekono (maʕɨχono) has the meaning 'center'. Thus, the village now called Maekono (maʕɨχono) has been serving as a center of meeting as well as settlement for the writers of miracles who are collectively named *s'eħafti* 'writers' about the glory of St. Marry. The word *ʕadi-s'eħafti* 'home of writers' was adopted from the chronicles known as *s'eħafti.*

Maekono Village, which is a combination of few old huts and houses made of corrugated iron sheet which I could not see all together at a glance, for they are scattered and covered by forest, consists 30-35 households. The population number of the village is approximately 150-175 (assuming each household has five members). The members of the village are elders whose daughters and sons left away to other cities like Addis Ababa, Mekelle, Bahrdar, ArbaMinch, Nazreth, Dredawa, and rarely Asmera. Members of maʕɨχono community are followers of Ethiopian Christian Orthodox Church. This community recently has owned its own church which is built by wealthy man. All the priests who serve them are not from Maekono; they are from other villages around. But the members of Maekono community were using other church together with the other communities around them as the inhabitants of the village mentioned.

3.2.1.1. Livelihood Basis of Maekono (maʕɨχono) Community

The main source of income in almost all rural parts of Tigray is agriculture and livestock; their input is labor which comes from family members. And it is no special for rural parts

[10] Hayali (79 years old), who interviewed in December 3, 2010 in his village, is a member of Maekono community, whose grandfathers were metalworkers but he is not practicing it.
[11] Godeffa Legesse (74 years old), who is interviewed in December 17 in his village, is traditional metalworker in the village Hawelti in the town of Aksum

of Aksum. In Maekono, mixed farming is the dominant type of farming system which includes both crop production and animal husbandry. However, agriculture is the main source of income of the community. The community members love to own land which is incomparable in terms of significance to other sources of income in the eyes of the community members. My informant, Ato Gebretsadikan declares that "Farm land is considered to be priceless among the community", for it helps to produce the necessary crops as a mainstay of their economy. Their farm land, which they plough three times per year, grows crops like *t'af*, maize, wheat, etc if the rainy season is normal and the rainfall is sufficient. Like in many parts of Ethiopia, they practice traditional farming using oxen and ploughshare. They harvest their crops in November and December.

They also keep cattle including cow, sheep, goats, chicken, donkeys, horses, mules, etc. Since the crops they collect from the farm land most of time are limited, they are compelled to sale their domestic animals to fulfill the needs of their family members. In addition to this, the community uses to produce different handicrafts like metalwork, pottery, leather work and woodwork which nowadays are ignored by the youth part of the community.

Given that the community had rooted metalwork tradition practice, the researcher was expecting the transformation of metalwork practice is actively towards something better. However, most of the community members are abandoning metalwork for a simple reason that metalwork remains unprofitable compared to other jobs. This is because the introduction of manufactured iron tools dominated the importance of local blacksmiths' products. Besides, since engaging in different handcrafting skills had status indication in wealth and social prestige, the community members are not interested to participate in the metalwork.

3.2.1.2. Origin of Maekono (maʕiχono) Blacksmith Community

As far as the oral knowledge of the community indicates, the establishment of Maekono (maʕiχono) is associated with the coming of the Ark of Covenant of St. Marry of Zion to Aksum. In support of this idea, Gebretsadikan said, "The village Maekono (maʕiχono) is originated when the Ark of Covenant of St. Marry of Zion first brought to Aksum." And

the area was belonged to St. Mary Zion of Aksum, for it was believed that the Ark of Covenant was first found where the village now stands.

Ato Godeffa explains that the area currently called Maekono (maʕɨχono) was forest area when the Covenant of St. Marry first came into Aksum. This is to mean that the community came to live in the village after the Ark of Covenant of St. Marry came into Aksum. Since those days, blacksmiths of the area lived together in Maekono (maʕɨχono). Being impressed with how these people came to live together, the researcher asked Ato Kassa Tesfu and Ato Tsehaye[12]. They responded that it was to defend themselves the attack from the mainstream society. Therefore, nobody, except the blacksmiths or other people who are in need of metal crafts would visit them. Though the inhabitants attest that early settlers of Maekono (maʕɨχono) village have had a culture of ironworking, it is difficult to trace the exact time when and how metalwork in the village started.

The oral literature of the people in Aksum and its vicinities indicates that metalwork tradition originally is King Solomon's. Ato Weress[13] and Ato Godeffa argued that the art of metalwork was King Solomon's skill which he received from God. They also believe that Solomon transmitted his skill to his son Minilik I, and the subsequent generation did the same till present time. Ato Weress added that the nine saints brought some metal crafts and tried to teach some people around Aksum in addition to what Solomon's generation did. And it is this way the metalworkers came to being in Aksum. After the expansion of the modern town, some metalworkers migrated from the town to the surrounding villages; the kings and leaders were isolation them.

The origin of the village under discussion is masked in mystery. However, from the above discussion, it is possible to conclude that the establishment of the village currently known as Maekono (maʕɨχono) is associated with the erection of the Church of St. Marry of Zion. The introduction of blacksmithing tradition, however, was associated with the coming of the Jewish community to Ethiopia who were said to have accompanied Menelik I, the son of the legendary Queen of Sheba and King Solomon. Chronologically

[12] Tsehaye (29 years old), who interviewed in December 13, 2010 at his home, is a traditional metalwork in the town of Aksum

[13] Weress (72 years old), who interviewed in December 18 and 25, 2010 while he was working in the governmental garden protecting, is a traditional metalworker in Hawelti village of the town of Aksum

the construction of the Church could be put back to the 4th century A. D. after the adoption of Christianity by King Ezana, whereas, the coming of the Jewish community could be pushed back to 10th century B.C. based on the time and life of King Solomon. It is possible to say that the iron smelting tradition in the village does not pre-date the given period. As indicated earlier, this hypothesis, however, has to be substantiated by further research.

Even if inhabitants of Aksum indicate that Maekono (maʕiχono) villagers practiced ironwork for centuries, in the past few decades the metalworkers were returning back to the town of Aksum and practicing different metal related activities. Hence, it is difficult to find people who are practicing the tradition of metalwork in Maekono (maʕiχono). The new generation is either abandoning the tradition or taking it up in a more transformed way in the form of jewelry work, which is exclusively urban based. They move to Aksum town and practice the tradition there. Consequently, though initially this study was meant to document cross-making tradition among the Maekono (maʕiχono) villagers, due to migration of iron workers to the town, I was obligated to follow them and make my focus of study the town of Aksum.

According to my informants, the reason why the Maekono (maʕiχono) blacksmiths migrated to the town is largely associated with hostile attitude of the mainstream society. The label Buda or evil eye has not only strong pejorative connotation, but also hateful meaning that threatens the well-being of the blacksmiths. Thus, being look down and hated by the mainstream society, the members of the blacksmith community were obliged to migrate to Aksum town where the attitude towards blacksmithing, especially jewelry work is more tolerant and largely of business oriented. These are all the reasons why the young generation of the village Maekono (maʕiχono) by and large is abandoning this ancestral occupation.

3.2.2. Aksum Town

The researcher is trying to give you highlight on the present description of Aksum town on which numerous scholars produce dozens of works. The town of Aksum which has been claimed to be water body before arrival of the Ark of Covenant of St. Marry (as Ato

Gebretsadikan and Bellay orally described) is difficult to fully assess its historical background and its development. However, in a view readers have to know the present situation of the town of Aksum, I will describe the town briefly as follows. As the inhabitants of Aksum, it was by the good will of God the area changed in to dry land to serve as place for the Ark of Covenant of St. Marry Zion. The old part of the town after Beta Giorgis is Hawelti where the obelisks of Aksum and the Church of St. Marry Zion placed at as the oral history of the inhabitants assert.

Throughout the town, there are shops where different handicrafts like crosses are sold. Though it is also common to view handicraft shops in the entire town, these shops are very common along the road which stretches from the central town to Hawelti where the obelisks are found. Gold and silver smith, wood work, basketry and metalwork are common in the town. On the fences of every household compound, it is obvious to view either a design of the obelisk of Aksum or St. Marry Zion's old building design. This also is common in the houses and even in hotels and restaurants. In every house and hotel in the town, the picture of the obelisks of Aksum, St. Marry, crosses and different pictures related with Orthodox religion are commonly found posted.

The majority inhabitants of the town of Aksum are employees of different offices, and traders though the traders are also engaged in gold and silver smiths which are part of handicrafts. Almost half of the blacksmiths are not from metalworking family. They acquire the tradition through formal and informal education from the traditional metalworkers in different part of Ethiopia. Haile[14], for instance, is gold and bronze smith around Hawelti. Though he is not from metalworker family, he stated as he can also craft what every metalworkers can produce. To him it is a matter of skill that somebody produces any crafts like gold, silver, or generally metal products. He is not engaged in wax dependant metal smelting, for he thinks the profit which gained from this practice is

[14] Haile (37 years old), who interviewed in December 9, 2010 at his shop, is gold and silver bronze which he gained from traditional metalworkers

not satisfactory. And this is true to Tomas[15] (whose name is changed) who gained the skill from other smiths from Addis Ababa before two decades.

3.3. Historical Background of Marginalization and Its Present Situation

The blacksmiths in Maekono (maʕɨχono) had been marginalized. The marginalization, as many of the blacksmiths stated, had historical background. The rural village which entirely contains only blacksmiths has been formlated by the blacksmiths. They had to live together in order to protect themselves from attack. They took a mountainous place or the bottom of mountain, for it will be easy to them to protect from enemy as Tsehaye and Kassa utter. They also added, "The marginalization and negligence of metalworkers originally comes from Portuguese, not from Ethiopians." In addition to this, Ato Godeffa stated:

> The Portuguese were around Almeda (almәda) and were requesting Aksumites to train them the skill our ancestry had. The Aksumites were not willing to teach them. As a consequence, the Portuguese started to poisoned the metalworkers' generation saying the metalworkers are man in the day but are hyena in the night, they eat unclean meat, and they have supernatural force which causes for other illness and death. (Godeffa)[16]

The Portuguese community also threatens for the metalworkers' ancestry as they would proclaim genocide against the metalworkers. Following the Portuguese, Ethiopian society started neglecting and disrespecting the skilled men who were metalworkers (as the inhabitants of the study area). The community are not simply condemning Portuguese; I accept the Portuguese had this kind of feeling. Nevertheless, the origin of marginalization of blacksmiths needs to be substantiated with exclusive research.

They were insulted as "buda", "wax eater", and "hyena" as Ato Gerchi'el[17]. Not only the metal workers but also individuals who tried to disclose their skill on stone related works were forced to leave Aksum. As an example, Aba Libanos was tried to perforate a house from a rock found at May-Qoho, but he went away from the area, for he was threaten as

[15] Tomas (45 years old), who is interviewed in January 1, 2011 while working in his shop, is a trained blacksmith

[16] An interview with Ato Godeffa, 17 December 2010

[17] Gerchi'el (76 years old), who interviewed in December 6 and 7, 2010 and January 1 and 2, 2011 while he was working in his house, is a blacksmith in the town of Aksum

he had supernatural forces as Ato Kassa, Ato Woress, Ato Godeffa, and Ato Tsehaye agreed up on.

Figure 3. *The perforated part of the rock*

Aba Libanos tried to make home in the rock which might be now big tourist attraction like the other rock art of Ethiopia. However, the man was forced to leave the area because the then community hadn't positive attitude and understanding for handicraft workers. Ato Godeffa said Aba Libanos cursed the inhabitants of Aksum saying "let violence and disagreement govern you and may God will not allow to rain in Aksum." The picture, as you could be seen in figure 3, has three parts which look doors, and this tells us the man had a vision to make home there. Though handicraft workers had this type of excellent skill, Ethiopian society was marginalizing craft workers specifically metalworkers. Even some Ethiopian leaders or kings were neglecting the handicraft workers. As Richard Pankhurst (1961, 286) and Frederick J. Simoons, (1960, 180) mentioned, Emperor Zara Yaqob (1434-1468) was an example of such phenomenon (see 2.5.2).

In the near past times, the kings had not made much contribution for the development or to save the skill from death. As Ato Kinfe Brhane[18] explains the history of blacksmiths in the eyes of the past leaders, it is obvious that Emperor Hialeslasie had positive outlook towards traditional metalworkers; the Emperor was not claimed to isolate the metalworkers while they practice the skill as a source of income. However, the blacksmiths were not allowed to be priests or to serve in Orthodox Church rather can be served only, for they were considered as unclean. In addition to Ato Kinfe Brhane (metalworker), Zelalem Kassa[19] (*mergeta*) and Brhanemeskel Haile[20] (both are non

[18] Kinfe Brhane (44 years old), interviewed in December 6 and 7, 2010 and January 1 and 2, 2011 while he was working in his house, is a blacksmith in the town of Aksum

[19] Zelalem Kassa (38 years old), who interviewed in December 20 and 28 in the Brhanemeskel's handicraft shop, is not member of blacksmiths and his member of educated Church servants

[20] Brhanemeskel Haile (32 years old), who interviewed in the entire of the field work, is wood worker in the town of Aksum

metalworkers) told me that the blacksmiths were not permitted to serve in Church. Zelalem added, “Even this time there are some people who are not interested because the blacksmiths are permitted to serve in church though they keep silent for they afraid for the law of the government.”

In this regard, I asked a question to Ato Gerchi’el. He responded that internally the people may think metalworkers must not have to serve in church or are not equal with the society. However, he did never experience when such opinions are manifested from any part of the community; rather the people internally think that metalworkers have supernatural force which the community called “evil eye”. For this Ato Gerchi’el said, **ሞኝ ያቆየዉ ብልህ አይነቅለዉም**”. It is a proverb loosely translated as ‘wise man could not avoid what a fool established and maintained for a time.’ He added that segregation will never totally dismissed rather the people may develop their knowledge regarding metalwork to consider it as a skill which everybody can learn. He also said, “The name “buda”, I think, will not die away; the sprite will pass from generation to generation because I myself is talking what “buda” was to mean and my children will do the same.” What is good to Ato Gerchi’el is that the metalworkers are confident enough since they are skilled people.

3.4. The View of the Blacksmiths Toward Their Tradition

The metalworkers in and around Aksum feel proud of their skill though they experience discomfort what the mainstream society believe about them. They feel they are practicing the skill of King Solomon whose history remembered as a wise man in our world as Ato Godeffa expresses. He said that blacksmiths are gifted people who can produce different crafts including plain and can create many technologies (if they get the opportunity). The people who produce different vehicles are smiths. Consequently, blacksmithing is crucial skill which has indispensable contribution not only for economic development of a nation but also for improvement of many people’s life.

Most of the traditional metalworkers are surprised why the main stream society is condemning them while benefiting from the practice by using products like car, crosses,

and different metallic products. They hate blacksmiths and blacksmithing, but they love the products of blacksmiths and metal crafts. To the members of blacksmiths community, neglecting metalworkers from the main stream society is something the society did knowingly; the mainstream society seems to take the backward attitude for their forebears had this wrong attitude unknowingly.

In opposite, the blacksmiths are not interested to talk much about their skill and generation; they suspect that their skill and knowledge be copied by the other communities. Thus, they may loss market computation with others. This seems the reason why several individual blacksmiths are not voluntary to be recorded digitally. They consider a researcher is recording their activities and skills to steal and disclose it at market. They also do not like to discuss about it. Few of them also have a thought they do not care though the skill died with them. Every individual has specialization on different aspects of designing and producing crosses. Ato Kassa told, for example, about his old brother, Tewelde[21], a wise man in designing unique crosses and other crafts. Brhane[22] also believe that Tewelde is gifted man in the metal crafts and he is the only man in Aksum by creating new design crosses. However, Tewelde is not voluntary to be recorded. He suspects his skill will be exposed to stealing.

However, there are metalworkers who understand why scholars are researching. They are voluntary to be recorded. Though they do not disclose their technique and skill how to make the crosses for anybody, they consider the academicians are recording to protect the tradition (practice) from extinction. Though they worried what they will do if their skill is adopted by anybody, in some cases, these metalworkers do not like to allow the culture to pass away with them. For that reason, they are even positive to teach other people if they got a reward.

[21] Tewelde is not interviewed; one of his workers in his big shop said he is not volunteer though the servant request him as I need to interview him

[22] Brhane (28 years old), who interviewed almost in the entire of the field work period for he was my key informant helps me to met persons for my research, is non metalworker who owned one dig handicraft shop named 'Denver City Handicraft Shop' located in between the Aksumite Heritage Foundation Library and the church of St. Marry Zion

Most blacksmiths in and around Aksum are not training their children how to craft metal products; the new generation is not interested to learn the skill. Ato Weress said, "Most of my sons are not interested to smelt iron. They believe that they have not to be insulted "buda" by their friends in school and different areas." Some of his sons left to Addis Ababa and practicing gold smith there where there is no much segregation as exists here in Aksum. This skill will be priceless after few years when the mainstream society understand blacksmiths are just only skilled people and do not have supernatural force. Because of lack of understanding this might be true in the future, the new generation is reluctant to carry out the practice. This is true as a teacher[23] who teaches around Maekono stated, the youth part of the metalworker community is not interested to be disclosed as they are from blacksmith community. Accordingly, they are abandoning the tradition. Though the people, who are practicing traditional metalwork tradition, used as a main source of income in the town of Aksum, it is used as supplementary in Maekono.

3.5. Status of the Blacksmiths

The status of traditional metalworkers in Aksum and its vicinities is demonstrated by neglecting them to intermarry with the mainstream society and insulting them some derogative words. Even though there are special cases in which formal intermarriage is possible, the main stream society dislikes intermarrying with metalworkers. Ato Abrha Zeweldi said that individuals from the mainstream society ask the blood and genetic history of the person whom they need to intermarry with. If they get the household with metalworker forebear, they (member of non-metalworker) quit the engagement process.

Comparing with the other handicraft workers like woodworkers, basketry, tanner, weavers, and gold and silver smiths, the traditional metalworkers are more segregated. The potter workers are more segregated than the aforementioned craft workers but less segregated than the traditional metalworkers. Ato Gerchi'el told me that the trained gold, silver and rarely other metalworkers insult the traditional metalworkers who use wax. Many told that they have the skill but have no the supernatural force. One of my

[23] He (28 years old), who interviewed in December 3,4 and 5, 2010 while he was walking to his school around Maekono, is an elementary teacher

informants, Behabelom[24] (whose name is changed), said that he knows how to make jewelry but he has no the "evil eye" which he believes traditional metalworkers have. Therefore, most of the trained metalworkers slightly isolate the traditional metalworkers. Generally, isolation of metalworkers in and around Aksum still exists. However, the rate is getting down due course of time.

Astonishingly, having this view, the mainstream community is joining metalwork practice as a source of income. The mainstream society did not ignore the metalworkers in different social occurrences. They work, eat, share ideas and materials, and communicate freely with metalworkers. There are also some people who disallow the backward traditional belief to exist. Thus, they intermarry with metalworkers. Tsehaye's (metalworker) wife, for instance, is from non-metalworkers family who they did not permitted her to intermarry with him. Consequently, unless she visited her family, they do not visit her at all. In contrast, educated (aware people) intermarry with metalworker regardless his/her genetic history. As a result, the mainstream community expects the isolation and segregation will fade away through the progress of time. The blacksmith community, however, guesses the sense of blacksmithing and the wrong and drawback traditional belief towards them will not completely disappeared.

[24] Behabelom (41 years old), who interviewed January 1, 2010 in Aksum, is gold and silver smith in Aksum town

CHAPTER FOUR

4. Documenting the Entire Process of Metallic Cross-Making

In this chapter, documentation of selected metalwork processes in Aksum town and its vicinities is carried out. From the aggregate of metal working tradition, I select to document the process of cross-making in which migrants from Maekono (maʕiɬχono) village are engaged in the practice in Aksum town.

As to the understanding of the researcher, the metalworkers in Aksum, generally, are grouped into three. These are gold and silver smiths who are more integrated with the modern way of producing jewelries for they use different machines compared with the other groups of metalworkers. The group of traditional metalworkers, who produce products for agricultural activities like hoe and sickle, household equipments like knife, and weapons like spear and sword, is the second type of blacksmiths. And the third type of metalworkers group is traditional metalworkers who produce crosses and other church related products using stamp wax. Because of time and financial constraints, I did not incorporate the gold and silver smith and the blacksmiths who produce agricultural tools and in door equipments production methods in the present research. The study focuses on cross production procedures using wax melting method.

4.1. Techniques and Process of Producing Metal Crosses

For the purpose of this study, the techniques and processes of metal crafts are categorized into two: the fire management and fire related techniques on the one hand, and the process of crafting the products on the other.

4.1.1. Techniques of Fire Management

The techniques employed in metal crafting are several. However, the first technique used in ironwork in traditional blacksmithing activity is a mastery of fire management technique. Looking after the fire is crucial technique for the blacksmith's work. In actual application, the technique takes the following pattern. After adding the kesel (kəsəl) 'charcoal' into the frja (fʊrʤa) 'furnace machine', it is important to check the way the air

can be produced and directed to the charcoal container part of the machine. Habitually, while the charcoal burns a clinker will build up just below the charcoal container part of the machine and on the metal which is burning. Therefore, the ashes should be removed from the machine and from the raw material for the ashes start to stick to the metal which is being heated up and melting down. The clinker can be removed by allowing the fire to cool down slightly which makes the ashes harden into a lump and lifting the piece of metal out or adding chikar (ʧɨkar) 'borax' into the raw material melting down. Therefore, the process of heating or boiling of the metal will be continued and acted by fresh charcoal as Ato Kassa usually did.

To know how the process works, I personally participated in the activity. While I was helping Ato Kassa generate the air by rotating the machine's handle anti clock wise, he told me that I have to drive the handle slowly for the fire needs to be slow in the particular step. Because, the fire should be kept within a normal range so as to create conducive fire size and to produce quality products. If the fire is too large, however, it wastes much charcoal and became difficult to manage the temperature needed for the work. If the fire is too small, it will be difficult to reach a good working temperature and consumes time and energy. Therefore, the primary skill a metalworker should know is how to manage the size of the fire.

Being able to recognize the right temperature at which to work metal is other important skill of the blacksmith said Ato Kassa. Different types of raw materials like the clay, wax and metal need different temperatures to work on. Even different metals need different degree of temperature. For instance, silver which contains other compounds like iron needs more temperature than the pure one. The metal must be removed from the fire when the temperature reaches in the needed degree. Since traditional blacksmiths do not have modern devises for measuring temperature, my informant, Ato Kassa told me that they use visual method. According to him, the right level of temperature is recognized by looking at the color or brightness of the metal. If the metal takes red color it is a time to weld and reshape, as an example. Next, the big raw materials are needed to be broken down into pieces after they are heated in a fire. The divided pieces of raw materials need more temperature to melt down than for breaking them into pieces.

Certain types of steel can be weld together using other than the heat of the fire and the pressure of the hammer below. They can join together by heating them in fire and adding chikar (ʧɨkar) into the juncture of the parts of the product, if you like, in case of joining parts of certain cross together as Ato Kassa did. When heating the parts of crosses, as Ato Kassa, recognizing the right moment to remove the metal from the fire to weld asks experience. “When the metal has reached welding heat, no time must be wasted to remove it from the fire to not let it melt down”, said Ato Kassa. The other techniques of metal smelting in case of crafting metallic crosses by melting down wax will be discussed together with the processes of cross-making in the upcoming paragraphs.

4.1.2. Process of Producing Metallic Crosses

In Ethiopia, especially in the north where Christianity predominates, there are three types of crosses which are locally produced. These are: the pendants (neck crosses), hand crosses, and processional crosses (see 5.3). In this subtopic, I will try to analyze how metallic crosses are produced by traditional metalworkers in the town of Aksum. All the processes employed for the production of this material culture are documented both textually and digitally. For the purpose of this documentation, I selected processional crosses produced with the help of wax stamp. However, I have to note here that there are other techniques of cross production, which I didn’t capture both textually and digitally. I only focused on the crosses peculiar to Aksum, whose designs are reproduced with the help of wax stamp. Below is the entire process of producing metallic cross using wax stamp.

For a blacksmith, to produce a cross, preparing the necessary tools, equipments, and raw materials for production as described in chapter five is the first step. Next, the process follows the following pattern: melting of the wax in a container to produced a pure wax on which to stamp a design, which will later serve as a mold; stamping of a design from a pre-existing cross on the wax by carefully attaching the cross on a hot wax; coating the designed wax with mud and donkey dung; burning out the coated sme’i (smɨʕi) ‘wax’ to make it strong; separately smelting metallic scrap in a furnace; casting the smelted/liquidified iron into the mud coated wax design; cooling down the caste and

carefully removing the mud from the cast (now already transformed into a new cross); attaching the handle to the cross and finishing by polishing and smoothening the newly produced cross. In the following few pages, I will explain the entire processes supporting each steps with pictures.

Procedure I: Melting the Sme'i (smɨʕi) 'Wax'

As indicated earlier, extraction iron from its ore in northern Ethiopia is already a forgotten wisdom (see A. Pankhurst 2006[25]). Nowadays, blacksmiths use metallic scraps purchased from local markets for production of iron tools, crosses and jewelries. Thus the process of producing crosses and other related jewelries starts from purchasing metal scrap from market as described in chapter five below. After the scrap iron, the soil which is important to coat the designed wax and other ingredients are prepared, the wax must be meltdown into liquid. Melting of the wax does not require much charcoal for the wax is easily meltable . However, the community has no any measurement device to specify at what degree of heat or temperature the wax can be melted down. For this matter, the traditional blacksmiths face problems with understanding the exact temperature at which the wax melts. If the wax is melted too much, it will be changed into froth and becomes valueless. Therefore, careful observation is needed while it is boiling. Figure 4, below shows the process of wax melting used by Ato Kassa, one of my key informants. Look at how Ato Kassa is attending attentively the size of fire and the materials he uses to carry out his work, which includes a fernnelo (fərnnelo) 'metallic hearth', dsti (dɨsti) 'steel pot', kesel (kəsəl) 'charcoal' and methari kesel (məṯhazi kəsəl) 'charcoal scuttle'.

[25] Indigenous Knowledge Systems in Craftwork: The Cases of Iron Smelting, Tanning and Weaving in Ethiopia: Available at http://www.ossrea.neet/index.php?option=com_content&view=article&id=258 retrieved March 1, 2011

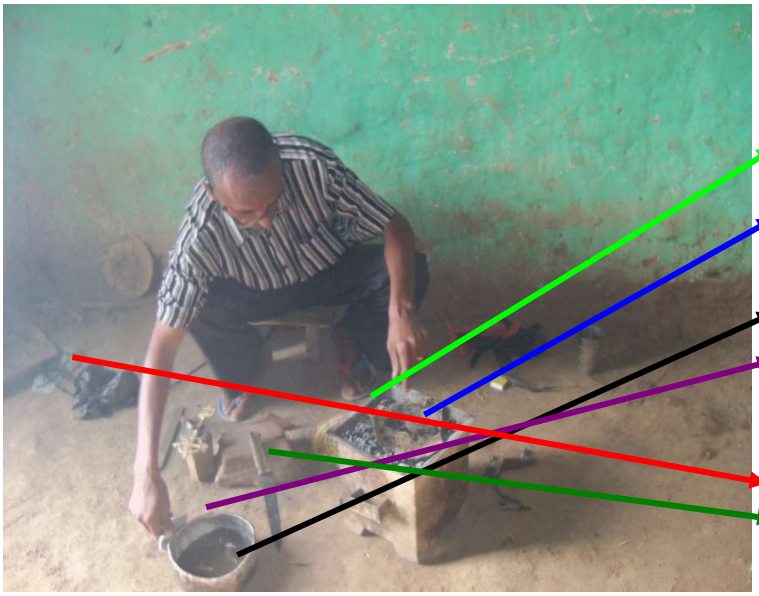


Figure 4. Process of boiling and filtering the wax

a) fernelo (fərnəlo) 'metallic hearth'
b) metsreri (məs'ɨrəri) 'filtering device'
c) dsti (dɨsti) 'metallic dish (pot)'
d) zfelhe sme'i (zfəlɦə smɨʔi) 'boiled wax'
e) kesel (kəsəl) 'charcoal'
d) kara (kara) 'knife'

The process starts by acquiring the necessary raw material, i.e., the wax and then smelting it in a steel pot. Then, filtering takes place. The filtering process is done using a net like filtering device as could be seen on the metallic hearth (it could also be done using cotton cloth produced locally to control the passage of filth down together with the liquid wax into the flat metallic dish). Next, the wax should stay for around an hour (though it varies as the thickness of the wax so as to let the wax dry and get ready to be removed from the flat metallic dish). To take away the wax from the flat dish, the dish needs to be fairly heated. Otherwise the wax will be broken into pieces and will be meaningless or needs to be heated and filtered again. After the flat dish get hot a lit bit, the person should insert a slash knife between the wax and the flat dish to disconnect them. If the temperature of the fire gets much hot, however, the wax melts down into liquid. Therefore, the metalworker must skillfully keep the heat at an optimum temperature. After that, the wax takes the following image (figure 5). As you can observe from the bellow figure, the wax has uneven structure which is obstacle if the metalworker tries to take the design on it. Therefore, before the metalworker tries to have the design of a certain cross on the wax, he must remove the uneven part of the wax as depicted below.

Figure 5. tsriru zdereke sme'i (s'ərirʊ zdərəχ'ə *smɨʃi) 'the wax after removed from a dish'*

Using a small metallic knife, the wax needs to be wiped for it should be labeled so as to make possible designing deferent designs on it. Since the wax originally is dry and easily breakable, the metalworker must warm up it with a fire or sun. This way, the wax becomes flexible to work on it. Then, the metalworker attaches the cross which he intends to produce on the wax, as depicted in figure 6 bellow.

First of all, the metalworker takes the general and outside picture of the cross he is looking to produce. Then after he scratches the wax till it gets thin so as to pierce it easily by a small metallic needle and not to consume much silver for one cross. In other words, the thickness of the cross which will be produced is determined on the thickness of the wax. Therefore, the worker will scratch it till it fits to the metal craft which is intended to be produced. It is also helpful to determine the weight of the cross and to guess the amount of the raw material to melt and cast in to the dry clay which coats the designed wax.

Procedure II: Re- producing the Design

After the wax takes its appropriate thickness, the metalworker now re-produces the design of a cross by attaching the original cross on the wax. The wax needs moisture by getting close it to fire; thus, it stigmatizes the cross on it. Hence, the person will take appropriate external design of the original cross as you can see in the follow figure.

Figure 6. Reproduction of the design

a) The wax ready to work with
b) A meskel (məsk'əl) 'cross' from which the design is to be reproduced

As could be seen from the figure above, Ato Kassa is trying to reproduce the external structure of the cross on the big wax. Some part of the wax is used for a single cross; the remaining part of the wax is used to reproduce a mold for other cross or to make other part of a cross like its shaft. After the wax takes the internal surface design of the craft which has quadratic structure, the metalworker again must make the internal design and structure of the cross by attaching it on the wax. Then after, he must again scratch the designed wax with a small knife so as to avoid the uneven part of the wax which is created while making the first internal design of the cross. The other side of wax also must be scratched. Then the metalworker gets a well designed wax as shown below (see figure 7).

Figure 7. The design reproduced on the wax

The art of the original cross served as a design is slightly observable in figure 7. The design as could be seen in this figure is only lined. The metalworker checks if there are some missed designs for he must complete the designs looking the original cross. Therefore, the person should compare the sketched wax with the original cross. He may not proceed if there appear unfixable errors in the course of reproduction. The designed wax, as could be seen in figure 8, has the same structure with the original cross. The internal holes of the original cross are indicated with dots and lines on the wax. Therefore, the next step is piercing the dots and lines into holes as required.

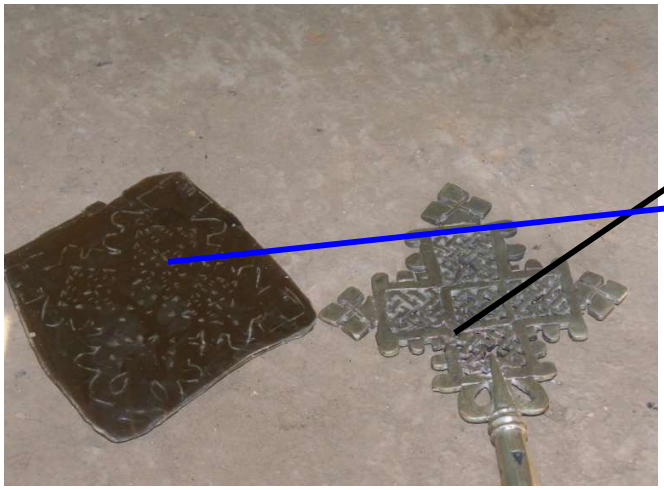


Figure 8. Comparative view of the original and the reproduced design

a) Original cross

b) The replica reproduced on the wax

In the above figure, the design on the original cross and the design reproduced on the wax are compared with a view to ascertaining whether everything is properly copied or not. After this the person is going to pierce holes into the designed wax so as to get the same structure of the original cross. Here, it needs care for the holes should not have different size and structure from the holes on the original cross. Thus, the dots and lines must be penetrated carefully to let them changed into holes. To make sure this is done by Aksum blacksmiths traditionally, let you compare the original cross with the designed wax bellow in figure 9. The difference between these two objects is that the first one is metal while the second one is wax. They are the same in their structure unless you complained that the metal one has a handle which will be reproduced differently in other steps.

Figure 9. Comparison of the cross on the left with the reproduced design on the wax in the right

The cross and the molded wax have Aksumite cross design. The middle part of the cross has a symbol plus. It is the same as the buildings of ancient Aksumites and the old Zion's building which is located in Aksum. The picture you are looking in figure 10 bellow is the end design of the wax which is ready to be coated in mud. What makes it different from the above molded wax is that to the below picture, the handle like part is added. This part of the design is called a'ini (ʕajni) 'eye'. The function of this part of the wax is that letting the wax fellow

out when the graved clay added into fire. It is also this way the liquid silver or bronze cast into the dried clay which will be discussed in the following parts.

Figure 10. zkber sme'i (zχ'bər smɨʕi) 'The final draft of the wax which is readymade to be coated'

The picture in figure 10 neatly shows that the wax has contained the structure of the original cross which contains many designs. At the three tip direction of the cross, there are three cross like designs, which is the natural structure of the original cross. Several holes are in the middle part of the cross. Those holes are important to enfold mud in them where the casting bronze will take that design after the wax is freed from the clay.

Procedure III: Coating the Designed Wax

After the whole design of the wax is completed, the molded wax must be engraved by mud which is a combination of soil extracted from a place called May-Qoho and donkey dung. Since the soil becomes so dry to break it down, the donkey dung is used to making it somewhat soft and protecting the clay from cracking easily. If the coated clay is cracked, the metalworker faces difficulty for the clay does not hold the melted bronze; the bronze will leak out through the cracks of the clay. In addition to mixing the soil with the dung of donkey, the mud must be beaten much so as to make smoothen it when covering the molded wax.

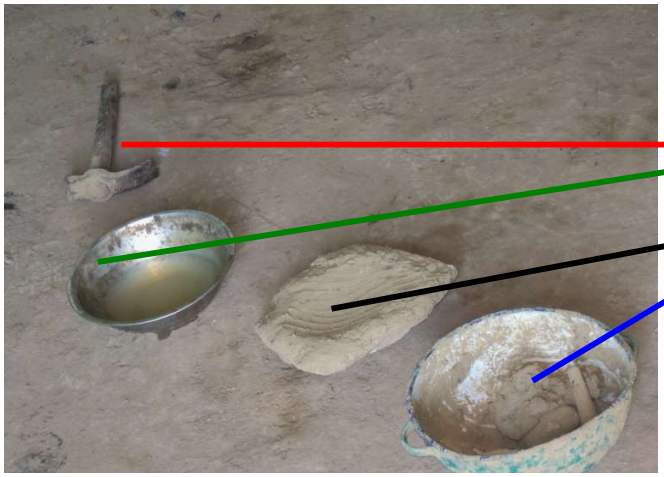


Figure 11. Materials used in the process of coating the designed wax

a) medosha (mədoʃa) ‘hammer’
b) methazi may (məṯhari maj) ‘water container’
c) imni (ʔɨmni) ‘stone’
d) chika (çik’a) ‘mud (soil)’

These four materials are very important while the metalworker beats and mixes the mud by which the wax will be covered. The hammer helps the worker to glide and pound the soil before mixing it with water. The next one is a water container used to hold water. The stone is used to beat the soil on. For the cross working does not consume much mud, usually little mud is prepared. The other container is used to hold the mud or the soil.

Figure 12. View of a partially ztekebere (ztəχ’əbərə) ‘coated’ wax designed cross

To coat the wax by mud, an even wood or table which helps keeping the design straight is needed. Since the wet mud is usually sticky, the metalworker covers the wooden frame by soft cloth. Unless this is done, it becomes difficult to detach the mud from the wooden frame later on. In addition to this, the cloth is helpful to move the mud in every direction whenever necessary. Figure 12 shows that one side of molded wax is engraved by mud. The other side of the wax still needs to be coated.

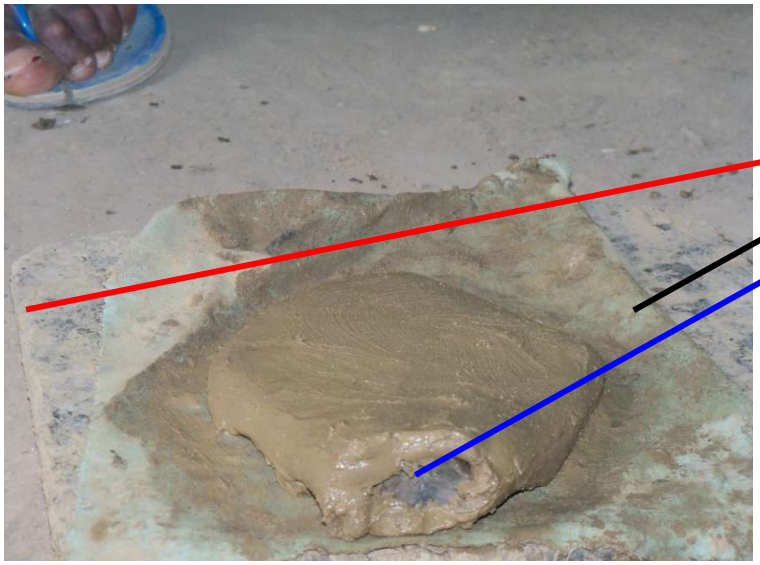


Figure 13. A completely covered wax design

a) tawla (t'awʊla) 'Flat wood (table)'
b) cherki (çərk'i) 'Cloth'
c) aini (ʔajni) 'Eye'

The designed wax is covered like this (figure 13). The uncovered part of the figure is called aini (ʔajni) 'eye', which is a path way (cavity) for letting a melted iron into the coated design later on. It allows the melted metal (bronze or silver) to cast into the empty space provided when the wax leaves out its space forced by fire. Waiting for a couple of hours after the design is entirely coated by the mud, the metalworker detaches the flat wood, the cloth and the clay. Then, the clay will be kept in a safe area where people could not touch it. According to my informant, Ato Kassa, it is better to keep the coated design (for around ten days) under a shade (where the sun could not reach) to protect it from cracking.

Figure 14. The coated wax design, the main part of the cross and its shaft

a) The shaft part of the cloth
b) The main part of the cross

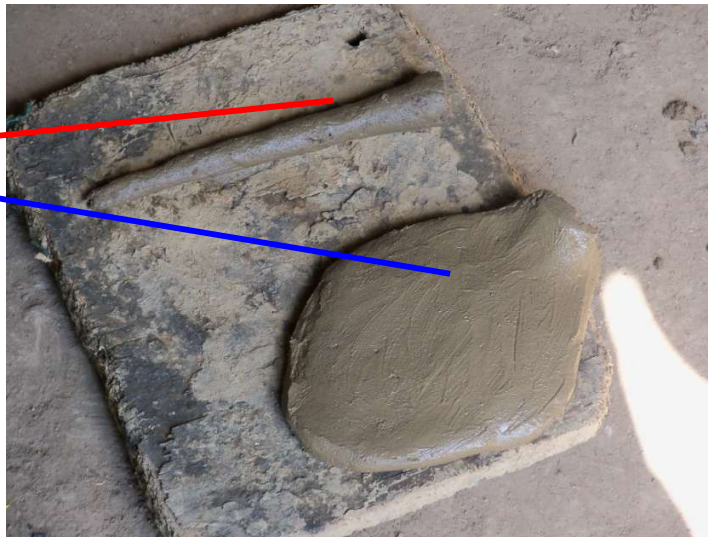


Figure 14 shows us that the wax is entirely coated with mud. The thin object lying next is the handle (also coated with a mud). After ten days (the time which required the mud to get dry), it is time to burn the clay for the purpose of avoiding the wax from within the clay.

Procedure IV: Burning the Wax

After the clay gets dry enough, it must be added into fire so as to remove the wax from within it. The clay also must get hot for the metalworkers believe that the hot clay has a power to grasp the liquid metal. As you can observe from figure 15 bellow, the clays are quite dry.

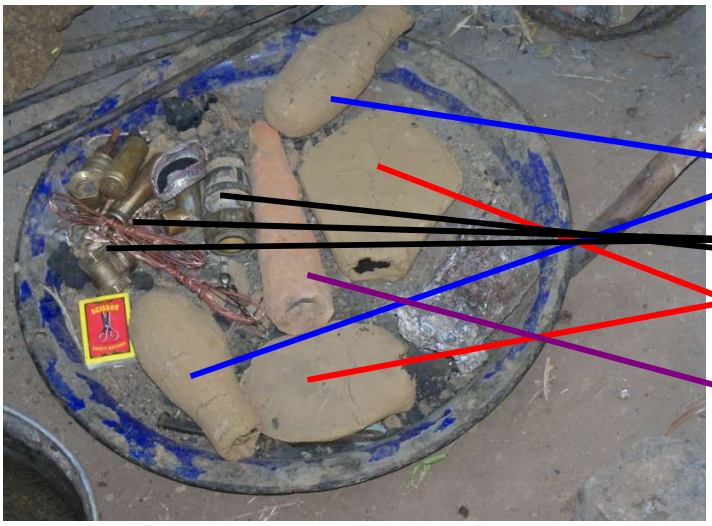


Figure 15. Metallic raw materials and the clays hold the designs

a) Designs hold two different tslat (s'ɨlat) 'covenants'
b) hatsin (ħas'in) Metallic raw materials
c) The sheklatat (ʃəχ'latat) 'clays' hold main body of two different crosses
d) The clay holds the shaft of cross

The raw material, which are purchased from market and the clay now are ready to be added into fire. The clay and the raw materials need different temperature as to Ato Kassa. The clay will be added into a slow blazing fire for a combustion of which a cattle dung is preferable than charcoal. The metallic raw materials, however, need highly flaming fire which the community prefers to use charcoal.

As could be seen from figure 15, there are five differently shaped clays. The long one holds the handle (shaft) of the cross. The two flat clays contain designs of two main parts of different crosses. The other two designs, found at the top and bottom of the picture contain two different covenants. The handle of the cross as you can observe from the above figure is reddish compared to the other clays. This is because it was burned in a fire and the wax is removed away from it. The other four designs, however, are not yet added into fire. Hence, the designed wax is still in them. Now all will be added into highly flaming fire fueled by dry cattle dung. This is done for the purpose of removing the wax from the clays and to let them not; to let add melted metal into them.

Figure 16. A free space where Ato Kassa carryout his activities

a) The znedid (znədɨd) 'flaming' kubo (kʊbo) 'cattle dung'

b) furja (fʊrʤa) 'The machine'

Ato Kassa, as could be seen from figure 16 above while working in an open air space. He is firing the dry cattle dung. The machine locally called furja (fʊrʤa) is ready there in his side. There is charcoal on it which will be burned after the designed clay is added into the scorching dry cattle dung. The degree of the hotness of the charcoal has to reach its maximum so that the metal could easily be smelted. I have to mention here that the degree of the temperature is only assumed, not measured for the traditional metal workers have no device to measure the temperature. They only rely on visual effect. Simultaneously, the raw metals will also be added into the burning charcoal on the machine. The action is simultaneous because the metal raw material should be changed into liquid while the designed clay gets hot as needed.

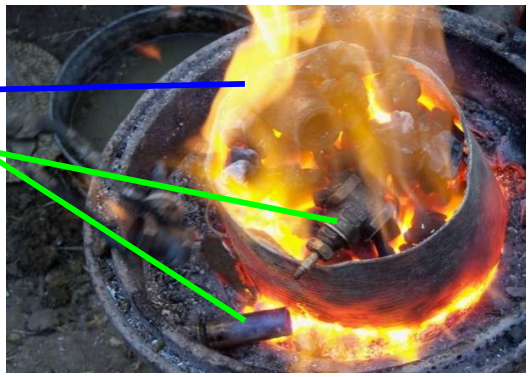
Procedure V: Casting the iron (Bronze or silver)

While the clay is burning in the scorching cattle dung, the raw material side by side must be heated and melted down in to liquid. This is for the purpose of avoiding the wax from the clay and to melt down the metallic raw material in the same time.

Figure 17. *The charcoal scorching in the machine*

a) The flaming charcoal

b) The metallic raw material in the hawi (ɦawi) 'fire'



The flame of the fire is now in its maximum level to the machine can produce the air. In the charcoal, there is the melting pot which contains the small sized slivers. Now the

silver in the melting pot is melting down while the big sized silvers are heating as could be seen in the figure for they need to be easily break into pieces and will be suitably added into the melting pot.

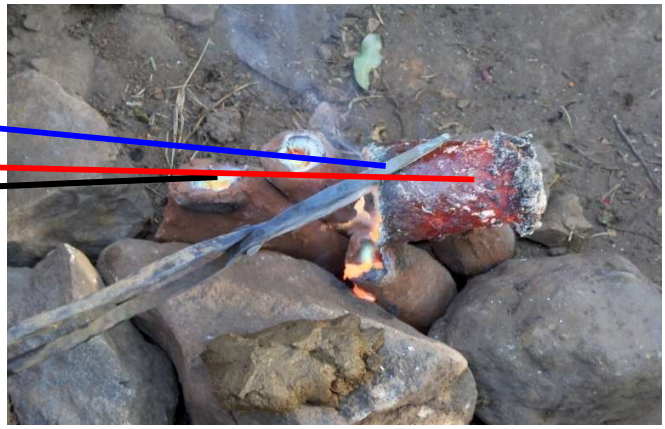
Figure 18. The melting pot in the machine

a) kbri (kɨbri) 'The melting pot'

b) zfelhe hatsin (zfəlhə ħas'in) 'The metal liquid'

Ato Kassa now is checking whether the melting pot is full or not using the long pincers. If the container has space, he will add some other raw materials to be melted into it; unless he will directly cast the melted metal into the prepared mud covered design. He is controlling the degree of the temperature and to what extent the metal is changed into liquid using the pincers. He has no any modern measurement to check the degree of the temperature at which the metal can melted down. He controls the melting pot by the long pincers which are useful to handle hot materials.

Figure 19. Casting the melted metal into the designed hot clay



a) gutet (gʊt'ət) 'Pincers'
b) kbri (kɨbri) 'Melting pot'
c) Mud coated wax design

The above figure shows how the pincers are used to control and handle the hot melting pot that contains the melted metal when it is added into the clays. The mud coated wax designs are hot and the melted metal is added into it as soon as it is removed from the fire. Otherwise, it will get cold and becomes solid. The liquid metal is added into the clay through the special cavity called *ʔajni* which I mentioned in figure 13 above. When the liquid of the smelted iron is added into the coated design, the melted raw material directly replaces the position of the wax

had. Therefore, when the metalworker breaks the heated clay after one hour, he will find a metal which has the same structure and design of the wax which leaves its place forced by the fair.

Figure 20. mzhal (mzħal) 'Cooling' of the hot clay after casting the melted metal into it

After the liquid metal is added into the designed mud, it must be stay for around an hour to be cold. Or it must be added into water. Therefore, the clay and the metal in it will get cold. The reproduced also cross will not easily be break when it is separated from the clay.

Procedure VI: Separation of the cross from the mud plasters (cover).

Figure 21. msbar (mɨsbar) 'Crushing down' the mud to free out the coated metallic cross

As could be seen from the figure, Ato Kassa is breaking down the mud to get the intended craft. He is slowly hitting it by small stone. He told me that the expected craft may or may not be produced. If the intended craft is spoiled because of different problems, he will again design other wax and grave it into mud. While the metal will melt down to use it again, the charcoal, the soil and the wax became useless.

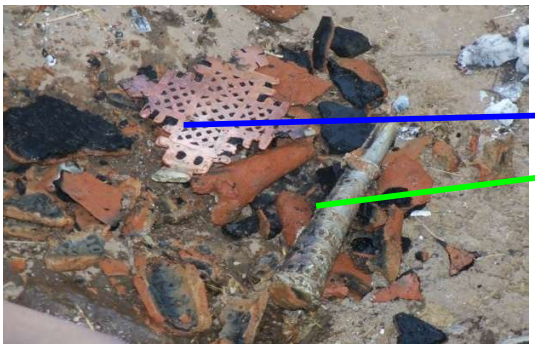


Figure 22. The newly produced cross and its shaft

a) iti zteserhe meskel (ʔɨti ztəsərħə məsk'əl) 'The newly produced cross'
b) nayti meskel methazi (najti məsk'əl məthazi) 'The shaft of the reproduced cross'

The cross with its two parts is crafted as could be seen from figure 22. This figure shows after the cross is removed/detached from the mud cover but not yet cleaned and polished. The handle as you can see from the picture now contains the mud in it while its

exterior part removed. The clay which was used to craft the cross will never be used again for its content is changed in to ash. After the clay is removed from both parts of the cross using metallic rub (file) and sand paper; the two parts of the cross must be joined together. Therefore, a metalworker must fasten the parts of the cross together using silk and scissor. Then, the cross will be added into fire. At the juncture of the parts of the cross, *chikar* (a kind of glue) and piece of bronze or silver must be added. While the pieces of the metal raw materials help to fill the gap between the parts of the cross, the *"chikar"* helps the parts of the cross stick together.

Procedure VII: Finishing

Figure 23. mtbak (mt'baχ') 'The fixing/ attaching/welding' the handle to the cross

Fixing the handle or attaching it to the cross is one of the finishing touches that the metalworker undertakes. In the machine, the parts of the cross are heating to be attached. The charcoal used to produce the needed temperature now should not be as much as it was during smelting. This is to protect the cross not to meltdown into liquid, as Ato Kassa states. The metalworker checks up, using long-standing experience, whether the parts of the cross are attached together or not. A blacksmith must add little water into the cross which is heating to get it cold. The water protects the cross from melting down. In other words the water returns the cross into quite solid. Then after, the cross will be removed from the fire.

Figure 24. *View of a processional cross after its parts are joined together*

The cross, after removed from the fired charcoal takes this image. In the juncture of the handle of the cross and the main part of the cross, there is a silk which was used to fasten the parts of the cross together. Now it must be removed using the pliers for the parts of the cross are already aligned together.

Figure 25. mkula'e (mɬχʊlaʕɬ) 'Cleaning' the crafted crass using water and lemon

The last finishing act/step is cleaning the cross using water and lemon to avoid the black color of the cross. At this step, the cross needs to be scratched by other materials. And the cross still needs to be cleaned by other skilled workers to make it quit clean and to have its original color. Therefore, this is the last step of producing crosses by melting down wax in and around Aksum. This step is called *"mkula'e"* (polishing) according Ato Kassa's expression.

To sum up what has been said, the process of cross-making in Aksum is a complex activity that involves seven steps. All these steps though interrelated are unique in their nature and need careful handling. Yet, in light of the fact that only few individuals are interested in taking up the profession, unless properly preserved and promoted this traditional wisdom will disappear in the near future. This is why documenting such an indigenous knowledge before it vanishes (ceases to exist) is so crucial.

CHAPTER FIVE

5. Description of Tools, Raw Materials, and Metallic Crosses' Market

5.1. Description of Tools Used in Cross Production

The tools and technologies employed in the process of cross-making tradition in Aksum and its vicinities are primitive and traditional. The tools predominantly are produced and manufactured with in the nation. There are also other few tools imported from abroad. Some others are selected from scrap irons of crashed vehicles. In the subsequent pages, I will describe the function, production setting, cost and durability of the tools. The description is dependent on the interview done with some of my informants.

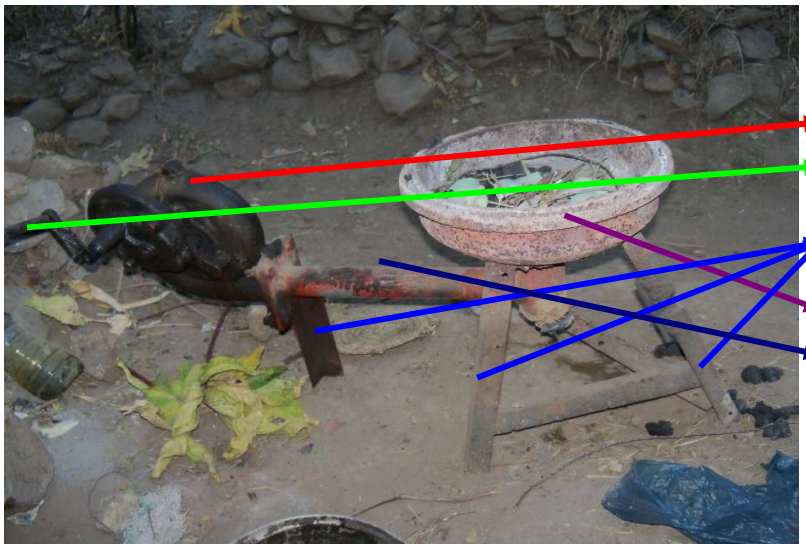


Figure 26. The furnace (machine)

a) Part of the machine where air is produced
b) mezeweri (məʒwəri) 'Handle of the machine'
c) igritat (ʔiɟgritat) 'Legs (stands)' of the machine
d) mendedi (məndədi) 'The hearth' part of the machine
e) *tubo (tʊbo) 'The pump' which draw air into the hearth*

This is the machine, locally named *furja,* and is used by metalworkers to produce air. This is by far a modern instrument compared to traditional blows used by most Ethiopian blacksmiths. Rotating the machine's handle to the left, metalworkers manage to generate air in the machine's right part which looks like a dish. The charcoal burned here. The big sized and long raw materials should be added into the burned charcoal since they are needed to be easily broken down using hammer or strong stone. It is also helpful to meltdown metallic objects after it is added into melting pot.

Though the machines supports and hearth, nowadays, are produced in Ethiopia, its origin is Italy as to Ato Kassa and Ato Tsehaye. The main part of the machine where air is generating is imported from the aforementioned countries (with a cost range between 400-500 birr). Unlike in the town of Aksum, it is hardly possible to find the machine in the rural vicinities of Aksum.

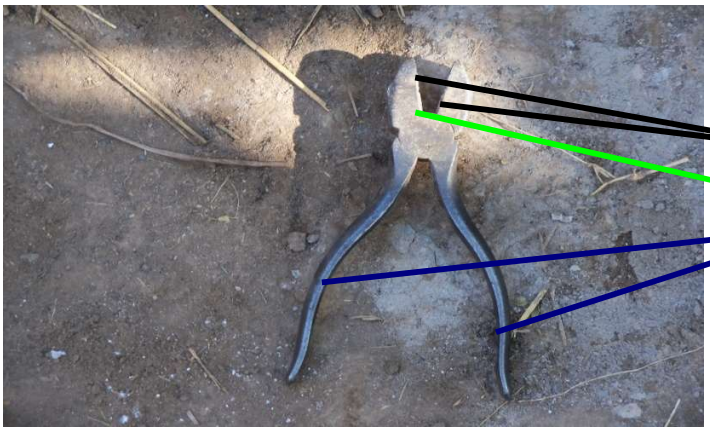


Figure 27. bsaj (bsadʒ) 'Combination' pliers

Locally this is called *bsaj*. Pliers are handy used in cutting, holding and griping pipes, and twisting, turning, pulling and pushing small wires as stated by Ambaye Tekeste and et al (1982). It is useful to hold metallic wires whilst the metalworker uses it fastening things together. Ato Kassa uses this while welding the shaft with the main part of a cross. In some cases, it is crucial to hold up hot metallic objects. The lower parts of the pliers are handling. When a person splits apart the handling, combination (slash and rubs) parts gets wider so that objects to be tied together or to be cut and spliced will be added into it. This metallic tool either can be produced in Ethiopia or imported; its price is 35 in the town of Aksum.

Figure 28. mebred (məbrəd) 'Metallic rub (file')

The metal file is used to remove uneven parts from the crosses. When a metalworker rubs the cross using the metallic file, the black color of the craft which created when burned in fire changed into the original color of the raw material used to craft the cross. Ato Kassa stated that old metal file should be used to rub hot materials while the new one should be used to rub and even the cold crafts to protect the new once from damage. The metal file

is also used to slash and point parts of metallic objects. The metal file is imported from Addis Ababa into local markets where the blacksmiths purchase it. The durability of the metal file is more than four years as Ato Kassa experienced, and its cost is about 27 birr. Rubbing of metallic objects was done by white stone as Ato Gebretsadikan oral utterances represent.

Figure 29. brchiko wereket (brçɨk'o wərək'ət) 'sand paper'

This is helpful to make the metal craft ashy. Crosses get black while melting down the raw material and burning it in a fire. It may contain different dirties made of mud and charcoal. Therefore, the metalworker needs rubbing it using sand paper to avoid the uneven and unwanted color of the cross which could not be cleaned using the metal file. As could be seen in the figure, a piece of this material uses two or three times only. This is purchased (with a cost about 36 birr per meter) from the local shops.

Figure 30. megaz (məgaz) 'A saw'

The saw is used to cut down strong metallic objects. This can be used when unnecessary part is added to the newly reproduced crosses. It is also helpful to cut down long raw materials into pieces. The saw must be strong metallic so as to able cutting the metallic objects. This type of saw locally is 32 birr and is used for about more than five years as an interview with Ato Godeffa, Ato Kassa, Ato Tsehaye and Ato Gerechi'el manifests.

Figure 31. medosha (mədoʃa) 'Hammer'

A hammer is crucial for reshaping some raw materials which are big to add into the melting pot. Besides, it is important to hammer down the soil/ mud so as to make it flexible and elastic. Moreover, a hammer is important to hit when any leveling of products is needed. The metallic cross detaches from the clay by hitting it using hammer (can be done by stone as Ato Kassa is doing in figure 21). This material is common in Maekono (maʃɨχono) and Aksum town. The hammer used by the traditional cross-makers using stamp wax method should be small as to handle it by one hand. This material, as most other materials, is purchased (65 birr) from local markets though traded from Addis Ababa. Renewing handle part of the hammer, it can be used for about more than 15 years as to Ato Weress and Ato Tsehaye.

Figure 32. Meferferi (məfərfəri) 'a small metallic objects used to void dirty from crosses'

This is very helpful to avoid the soil or mud from the metallic crosses. After the metalworker breakout the cross from the clay, the metalworker must avoid any mud, charcoal and other big dirties using this small metallic item. This material is produced by the local metalworkers from scrap irons, and can stay for about more than five years if not lost said Ato Kassa.

Figure 33. Mekretsi (mək'rəs'i) 'a small metallic hand drill used to sketch the design'

This is used to outline the sketch of the cross intended to be reproduced. Take a look figure 6 above how Ato Kassa is using this equipment to design on the wax. It is also used to burst the lines and dots on the wax down into holes. This material, as Ato Kassa's oral utterances, is produced by the local metalworkers in Aksum town and its environs. The durability of this small metallic equipment depends on the way the metalworker reserved it; it can be used for more than four years.

Figure34. mesfn (məsfn) ‘The anvil’

An anvil is a block of hard metal (or stone) on which the blacksmith hammers metal into shape. Though an anvil should be mounted on a solid block preferably of wood, the anvil of Ato Kassa is planted on the ground since he uses it only performing easy tasks. It is located in side house of Ato Kassa where he works finishing of his products. In most cases, however, it is planted in the hearth that the worker can take the metals from the fire and place them on it and beat them into shape. The horn takes the left side of the worker (unless he is left-handed, in which case it should be to his right). He used the anvil to beat and reshape some crafts and to cut the raw materials into pieces. Though some anvils have a wide flat and other different parts, the traditional cross-makers using wax do not own such anvil for they do not perform many tasks on it. The anvil locally called *mesfn* is taken from iron scraps and serves for more than fifteen years.

Figure 35. meshrefit (məʃrəfit) ‘Ventilator’

This is the ventilator used to produce air. It must be vibrated handled in either side. This is very important when the metalworker needs less and unhurried amount of warm for different purposes. This material can be used, for example, when the metalworker melts down the wax. Besides, it is used to produce slight amount of heat to warm the designed wax which needs scratching. Moreover, this is used to produce small sized warm to weld parts of a cross together. This is produced locally and called *meshrefit.* This costs only two birr and can serve for more than a month.

Figure 36. tsefih hatsin (s’əfiħ ħas’in) ‘A flat metallic dish (plate)’

This is a plate where the liquid wax will be filtered onto. As could be seen in figure 36, on the gray part of the dish, wax was filtered for the purpose of cross-making. This material is purchased from local markets, is imported from other areas as to Ato Kassa.

Figure 37. dutet (gʊt'ət) 'The pincers'

Pincers (sometimes called tongs) are used to handle hot materials. Though there are different types of pincers, the cross-makers used only few of them. The above two pincers are used by Ato Kassa for his purpose of cross-making. Ato Kassa told two pairs of pincers are enough for his work. By grinding, filing, or sawing a groove crosswise in each of the lips, the pincers can be made to hold links practically as well as regular link tongs. These tongs are also important to control to what extent the raw material in the melting pot is melted down. Pincers either can be produced by local metalworkers or purchased from market.

Figure 38. mekulo hatsin (məχ'ʊlo ħas'in) 'The flat tin dish'

The metalworkers use this flat metallic dish burning cattle dung. Blacksmiths use this material for the sake of controlling and getting more heat. Ato Kassa experiences as the ground consumes much temperature to heat than the steel. This tin can also used to melt down the wax on it. And this is produced in Ethiopia but imported into Aksum from Addis Ababa, and can used for more than three years.

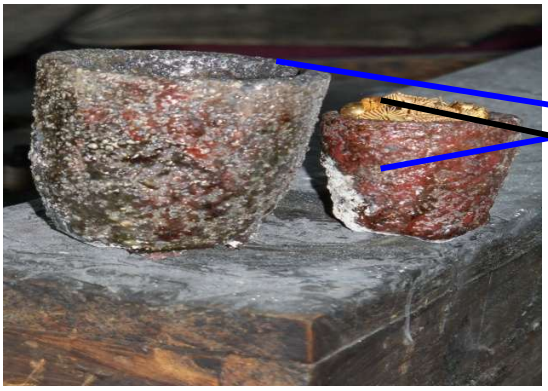


Figure 39. kbri (kbri)'Melting pot'

a) The melting pots
b) The raw material

These are two melting pots locally called *"kbritat"* which is plural form of *kbri* in which the raw material melted down. This equipment is made up of clay but crafted in a different way from the other types of pottery products people in Ethiopia can produce. It is imported from abroad countries like Italy and Dubai as Tesfaye[26]. The metalworkers seek a large melting pot to meltdown much amount of raw materials to save their time, charcoal and energy. The equipments as could be viewed in figure 39 above cost 50-70 birr each as to Ato Kassa, Ato Tesfaye and Ato Tsehaye. And one melting pot can be used for around half a year if it kept friendly.

5.2. Sources and Types of Raw Materials

The raw materials used for traditional metalwork in the town of Aksum and its vicinities can be categorized into two: those raw materials the metalworkers collect from their surrounding without fee in one hand, and those raw materials the metalworkers get through purchase on the other. The blacksmiths need soil from May-Qoho (found after 8 minutes walk in eastern direction from Hawelti). This soil does not easily broken and fractured. That is way it preferred for the work. The metalworkers add donkey dung into the soil for it makes the clay easily breakable while broking out the graved cross form within it. The following figure (figure 40) is some part of the area from where the metalworkers brought soil.

Figure 40. Part of the area from where soil exploit

May-Qoho is rocked area. Its name proves this and the inhabitants explained the name of the area is derived from two words of Tigrigna language May (maj)

[26] He, who interviewed in December 30 and 31, 2010 while he was smithing in his shop, is gold and silver smith in the town of Aksum

‘water’ and *Qoho* (koħo) ‘dry’ or ‘rocky’. Therefore, May-Qoho is to mean ‘water spring from rocky area’. As I observed, there are many stones and laid rocks. Since the few existing metalworkers require a maximum of one hundred kilos soil for half a year, the area they used to exploit the soil is coved by grass and stone. The metalworkers get the soil and donkey dung without payment.

Charcoal is other raw material the metalworkers used to meltdown the wax, the silver and bronze. The blacksmiths, most of time, purchase the charcoal from market where farmers supply it. The price of the charcoal is difficult to determine for the metalworkers most of time did not purchase measuring it rather looking at the container of the charcoal. But as I observed from the cross-making process, a metalworker can produce around three big crosses using charcoal costs about 23 birr. However, they would produce six crosses (double of what they are producing today) if they had a big melting pot which is twice of the present one.

Figure 41. Scrap irons supplied during Saturday market in the town of Aksum

Scrap iron is other basic raw material for traditional cross-making in Aksum and its vicinities. The blacksmiths purchase it from market where scraps of different metals are found. The metalworkers need only the bronze and silver from these collections of scrap metals and purchase 30-50 birr per kilo. In addition to this, the metalworkers can collect scrap metals and electric wires from their surrounding without payment though rarely. Besides, old crafts of silver and bronze are used as raw materials for cross-making in Aksum. The blacksmiths rarely can purchase old, outdated and faded jewelries from the farmers though they fail to compute with the wealthy gold and silver workers.

Figure 42. Maria Theresa and other different coins

Maria Theresa coin is also used as raw material to produce pure bronze made crosses. Nevertheless the size of the crosses, crosses produced from Maria Theresa coins are more expensive than the other crosses. At present time, the Maria Theresa is attracting foreigner tourists' interest; thus, they purchase it costly from suppliers. The local traditional metalworkers, therefore, face difficulty computing with the foreigner tourists in the plain of market.

Cattle dung is another crucial raw material the traditional metalworkers need to have. Cattle dung is used to burn the clay; the cattle dung gives high temperature. Besides, cattle dung is preferable since it is low cost.

Figure 43. Ato Kassa is mstk'kal (mstɨχ'ɨχ'al) 'arranging' the cattle dung

The cattle dung either purchased from other farmers who have cattle or made by the wives of the blacksmiths at their home (if they owned cattle). As could be seen in this figure, Ato Kassa is arranging the cattle dung on the flat iron material. The dried clay will be added into the collected and fired cattle dung.

When parts of one metal craft, say cross, are produced separately, they need to be connected so as to be one meaningful object. This will be done by the raw material named *chikar*. Adding the *chikar* into the juncture part of cross and heated by fire help the parts of the cross weld together.

Figure 44. Shikar, messager, and chew barud from left to right

The three containers hold different raw materials. The first one is called *chikar* (costs 30 birr per kilo) which is used to glue two things together with some power of heat. The second one is *messager* (ammonium chloride which costs 35 birr per kilo) which is used

to remove unnecessary chemicals/elements from gold. The third one is named *chew barud* (potassium nitrate which costs 70 per kilo) which has the same function with *messager* but is used after the gold worker employed *messager.* However, I witnessed when only *chikar* is used by the traditional cross-makers. All of these raw materials are imported from abroad countries like Italy and Dubai as to Ato Tesfaye. To sum up, soil, cattle dung, donkey dung, charcoal, different scrap metals, wax, and *chikar* are some of the raw materials used in traditional cross-making.

5.3. Description of Some Church Related Metallic Products

Most products of the traditional metalworkers in Aksum are church related. These are mainly different crosses (varying from big as processional crosses and small as pectoral or neck crosses). The crosses are categorized as Aksumite, Gonderean, and Lalibella crosses depending on their design. Ato Brhane explained as there are around 120 types of Aksumite crosses. Covenants, shafts of a stick, book stands and sistran are other products of traditional metalworkers.

Figure 45. Some metal crafts in Brhane's handicraft shop

In figure 45, there are different metallic objects which mostly are crafted by the present metalworkers. The angles' and God's words are painted by the painters on the crosses. The crafts are ready for sale to tourists in the souvenir shops. On the other hand, the metalworkers produce different jewelries consumed by the community.

Figure 46. Some old crafts of blacksmiths

This image incorporates different jewelries. All the pectoral crosses were used only by women. These metal crafts were produced to meet the need of the local consumers in the past time. In

the present time, however, the above crafts are not excessively producing. The blacksmiths nowadays, therefore, are not reproducing many metal objects which were produced by their forebears.

In the following few pages, there is a description of the old crafts which are not excessively reproduced by the present traditional metalworkers. Most of the crafts were status and sex indicator which now are out of these destinations since the community members wear regardless sex and age.

Figure 47. Old neck rings

These are three different neck jewelries locally called *gubagub, t'lsem* and *hrkm* respectively. These were historically worn by girls in the time of engagement. It was given as gift by the man who engages the lady. The lady worn this jewelry was engaged. At this time, it is hardly to find girls who worn these jewelries in Maekono (maʃɨχono) and in the town of Aksum. However, the local girls in the remote areas of Shire are wearing these jewelries as to one of my informant, Ato Haile. Otherwise, in the present time, either engaged or unengaged lady can wear these jewelries in different annual and ritual ceremonies.

Figure 48. mesakl (məsk'l) 'Crosses'

These pleasingly designed old metallic pendant crosses were used by girls in the time of engagement. This time, however, these metallic crosses are not produced by the blacksmiths living in Aksum and its vicinities. These old crafts are collected from the rural areas by the traders and presented for sale in different shops.

Figure 49. Old crafts presented in shop

As could be viewed in figure 49, the old crafts are presented for sell in Ato Tesfaye's jewelry shop. He told me that the coins and other crafts are used as raw materials for different jewelries-making, but he is profitable if he sold the crafts directly for tourists. This time, it is hard to find these crafts around the area for the blacksmiths are no more producing these metallic objects.

Figure 50. Different crosses at Brhane's shop

The crosses in figure 49 are mostly sold at non-metalworkers' shops. The crosses have different cost depending on their design, size, quality, raw materials used to produce them and the weight they measure. When the crosses designed get complicated, it takes much time to craft it and sold costly. As could be depicted in figure 50 below, there are three main kinds of Ethiopian crosses.

Figure 51. Different processional crosses

These crosses are big and most expensive crosses in 'Denver City Handicraft Shop'. This is because the crosses are big enough; thus, consume much time and raw material. Moreover, their design is complicated to extent one cross contains four small crosses as could be seen in the first cross of figure 50 above. Aksumite, Lalibela, and Gonderean

crosses are respectively posted from left to right as could be seen in the figure. The symbolic expression of these crosses is peace. Besides, the designs on the second cross have their own expression. The bird like designs on the lower part of the cross stand for doves and are representative of peace, wisdom and righteous. The twelve circles like designs (found at the top of the second cross) represent the twelve apostles of Jesses Christ. The circle like designs on the bottom part of the first and second crosses stands for Adam's arms.

5.4. Marketing

The base marketing process is held between the metalworkers and the handicraft shop owners. Most of the metallic crosses-makers sold their products for their stockholders. The metalworkers sold (with chip price) for souvenir shop owners since most of the metalworkers do not own souvenir shop because of lack of capital. The metalworkers produce objects by their stockholders' order to get money for their daily consumption. For example Ato Kassa is metalworker who owned little "souvenir shop" near to the place where the obelisks are found. However, he most of time produces metallic crosses and other objects like covenants by the order of Brhane who owned handicraft shop. The souvenir shop owners sold to tourists with a better price. In some cases, there are traditional metalworkers who owned little shops where they sold their products to local and foreigner tourists who came to visit the sites of Aksum. Tourists (mostly foreigners and rarely local) are the end users of the traditional metal products produced by the traditional metalworkers in Aksum. In rare cases, the souvenir shop owners also sold dozens of crafts to other traders in Addis Ababa.

Figure 52. Crosses displayed for sale in some shops

In figure 51, the first part of the figure, which has red background, is Ato Kassa's small shop where he sold some of his crosses and other objects. The second part of the picture, however, is Brhane's shop where he collects the crosses from different metalworkers and sold for different local and foreign tourists. In Brhane's shop there are also different leather, wood, and stone products which produced in the town of Aksum and its vicinities and even in other parts of the nation.

CHAPTER SIX

6. Summary, Conclusions and Recommendations

6.1. Summary

This MA thesis introduces Maekono community. This little village is found in the environs of Aksum town (after 45 minutes walk northwest direction from the town of Aksum). Besides, traditional metalwork in Aksum town and Maekono village got wide space in the entire paper.

The paper mainly aimed at addressing questions like: Where do metalworkers find raw materials? What are the procedures employed in cross-making? Is blacksmithing a status or social position indicator? And, what is the attitude of the mainstream society towards metalworkers? Accordingly, textually and digitally documenting/describing the process of cross-making practice is designated as major objective. To address this major objective, specific objectives like identifying the sources of raw materials, documenting the entire process of producing metallic crosses etc are formulated. All these objectives have been addressed by collecting data using triangular methods: observation, in-depth interview and focus-group discussion. Then, the data is analyzed interpretatively.

Metalwork tradition which had been overlooked by Ethiopian scholars and under estimated by the mainstream society of the nation for centuries has great contribution for tourist attraction and the economic development of a community. However, in the past time, metalworkers were not allowed to own land. They were considered as minority and even impure people.

Many scholars, especially foreigners, argue that the origin of metalwork tradition in Ethiopia goes back to ancient Aksumite period. This assumption though legitimate in many respects, nonetheless, tends to exclude the contribution of pastoralists and other non-agrarian societies of the country. Moreover, the assumption by the same scholars that the culture of metalwork was something adopted from external sources, especially from the Middle East and expanded from northern Ethiopia to the south needs to be substantiated by valid research. Otherwise, it remains speculative. In light of the emerging evidences that iron smelting tradition still exists in Southern and Western Ethiopia (see Temesgen Burka, 2010[27]), the above assumption needs rethinking. Thus, at

[27]See at http://www.amazon.co.uk/Iron-Smelting-Wollega-Ethiopia-Ethnoarchaeological/dp/3838361369 retrieved on March o5, 2011

this juncture, what we can say regarding the origin and expansion of metalwork in Ethiopia is that the issue remains controversial and seeks further in-depth inquiry.

Maekono is to mean 'center'. The inhabitants of the community believe that the village is formulated in relation to the coming of the Ark of Covenant of St. Marry. The metalwork practice is also associated with the building of the church of Zion in Aksum town. Moreover, the community members believe that the segregation of blacksmiths is associated with the Portuguese who lived in Tigray. The inhabitants of this village are no more practicing the tradition. They are moving to the town. They are practicing the tradition in the town. The community produces crosses after carefully followed and acted seven tiresome procedures.

6.2. Conclusions

From the above discussions and interpretations, I arrived at the following conclusions:

1. *The raw materials are scrap irons (there is no iron exploitation from its original ore)*: The raw materials are scrap iron, Maria Theresa coins and old metallic jewelries purchased from local market. Currently, no extracting of iron from its ore is practiced in the area. As aptly indicated by Alula Pankhurst (2006) and others, iron smelting tradition by extracting it from ore ceased to exist with the introduction and dominance of industrially produced metallic products in the 20th C. Besides, except few innovations, the tools the metalworkers use are predominantly primitive; dominantly produced locally.

2. *The seven procedures of cross-making are traditional and tiresome*: the seven procedures are: melting wax, reproducing a design, coating the designed wax, melting out the wax from the clay, casting the bronze or silver, breaking out the cross from the clay, and finishing. The procedures of producing crosses remained complicated and tiresome. In relation to this, fire and temperature management which are basic techniques of traditional cross-making are still attended traditionally.

3. *The metalworkers use the practice as main source (in Aksum town) and supplementary (in Maekono)*: Unlike the blacksmiths in the town of Aksum (trained and traditional blacksmiths), the members of Maekono community (only two are practicing it now) use it as supplementary means of earning income.

4. *Blacksmithing is status indicator*: The blacksmiths are more isolated than the other artisans in Aksum town and its vicinities. Though blacksmiths live together with the mainstream society in the town of Aksum, they formulated their own village and live together in Maekono. Nowadays, however, members of mainstream society are living with the blacksmiths in Maekono. The blacksmiths are not allowed to intermarry with the mainstream. Besides, they considered as "evil eye". The products they produce are also status indicator. They produce different crosses, covenants, small bells, and shaft of crosses. Small crosses are used as personal adornment; whereas, the big crosses are used in and outdoor activities of the Orthodox Church. A person (can also be a church) that worn (owns) sophistically designed and bright cross/s is wealthy in the community.

5. *The isolation of the blacksmiths manifested only by denying them to intermarry with the mainstream society*: There is no formal intermarriage between the mainstream society and blacksmiths. If a member non-metalworker marries with a metalworker, the non-metalworker bride/bridegroom will isolated from his/her family and relatives. Contrary, the mainstream society eat, share ideas and materials with the blacksmiths. The mainstream society is also joining the practice as a means of income.

6. *The traditional cross-making is endangered and in highly transforming level*: The traditional practice of metalwork in Maekono is endangered while it is highly declining with some transformations in the town of Aksum. The declining of cross-making tradition in Aksum town and its vicinities can be, firstly, judged by the fact that unlike their forebears, the present metalworkers are not creative in creating new designs. They are not even reproducing crosses which are sophisticated in design which made by their ancestors. Secondly, the number of metallic cross producers (almost all are elders) is highly declining. The

domination of foreign manufactured metallic products over the traditional one is the third reason for the endangerment of the practice. The cause for the declining of ironwork tradition around Aksum and the country at large could be attributed to lack of government patronage and support both in past and at present. The new generation is reluctant to take up the tradition not only because it is unprofitable, but mainly because it is also despised by the mainstream society that insults and degrades both the occupation and the crafts-men.

Finally, the above findings have a principal importance to the understanding of handicrafts in general and traditional metalwork practice in particular. The findings imply that the practice is important in different angles. Thus, the tradition needs to be improved and kept. Hence, different parts of the Ethiopian community have an assignment to do in relation to this. The results of the study also have contribution to different field of studies. It can serve as input for fields like anthropology, archaeology, linguistics, history, etc. Moreover, the end result of the study tells metalwork tradition is a wide field which needs further inquiries. There are unaddressed questions in relation to the topic. Therefore, any concerned field of study can use it as basis and plan to study in different part of metalwork tradition in particular and material culture in general.

6.3. Recommendations

In the last decade, the small and micro enterprises and Technical and Vocational Training Centers of Ethiopia have grown in terms of number and program. Consequently, several economic and technological sectors got all-round support and thereby began to contribute their own share to the development and poverty reduction of the nation. Though some aspects of metalwork like garage have been given emphasis in some urban areas of the nation, several traditional aspects of it were overlooked in these programs. In rural part of Ethiopia, consideration had not been given for this skill. This is also the very reality in Maekono and the town of Aksum.

Thus, the traditional cross-making in Aksum and its vicinities is endangered. There is no visible improvement. The new generation is not enthusiastic to practice the tradition. Market demand of the tradition products is decreasing and is dominated by the

manufactured products. The processes, tools and equipments used to produce the metallic crosses are tiresome and primitive. Since the tradition is important for several individuals, it must be revived through different mechanisms. The researcher recommends the following remedies to overcome the aforementioned problems of the tradition.

- The skill should be given due attention in Technical and Vocational Centers. It must be incorporated in the curriculum of TVET. If this remedy is curried out, the new generation will be aware to what extent the tradition is important in solving unemployment and is one way of generating income. Thereby, new models, design, machines and tools will be generated. Therefore, the local governmental offices (basically tourism and culture office, and small and micro enterprises office) should appreciate and advocate designing new curriculum which incorporates the tradition of metalwork.
- The tourism and culture office of Aksum should promote the tradition aspiring introducing it to market. This will have great contribution in the existence and continuity of the culture.
- NGOs aimed at assuring human equality and enhancing a nation's indigenous cultures and traditions should invest their money, skill and human power to save this heritage from extinction.
- Scholars should devote their time investigating this tradition in different angles of this topic including its historical origin and expansion in Ethiopia, comparative study of different metalwork traditions in different part of Ethiopia including Aksum, and prepare different manuals and guides how to improve the products, tools and equipment of traditional metalwork.

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Appendixes:
Appendix A: List of Informants

S.N	Name of Informants	Sex	Age	Occupation	Setting of interview	Remark
1	Gebretsadikan	M	84	Metalworker	December 3, 4, & 5, 2010: Maekono	
2	Kassa Tesfu	M	42	Metalworker	Hawelti	#
3	Mulubrhan	M	29	Civil servant	December 20, 2010: Hawelti	
4	Godeffa Legesse	M	74	Metalworker	December 17, 2010: Aksum	
5	Weress	M	72	Metalworker	December 18 & 25, 2010: Aksum	
6	Tsehaye	M	29	Metalworker	December 13, 2010: Aksum	
7	Abreha Zeweldi	M	55	Metalworker	January 5, 2011: Aksum	
8	Haile	M	37	Metalworker	January 1, 2011: Aksum	
9	Tomas	M	45	Metalworker	January 1, 2011: Aksum	*
10	Brhane	M	28	Trader	Aksum	#
11	Gerchi'el	M	76	Metalworker	December 6 & 7, 2010: Aksum	
12	Kinfe Brhane	M	44	Metalworker	December 20 & 27, 2010 and January 1&2, 2011: Aksum	
13	Zelalem Kassa	M	38		December 20 & 28, 2010: Aksum	
14	Haile Demoze	M	27	Teacher	Aksum	#
15	Habtamu Tesfay	M	27	Teacher	Aksum	#
16	Semhal	F	22	Student	Aksum	#
17	Brhane Abreha	M	34	Metalworker	December 9, 2010: Aksum	
18	Likanos Gebru	M	37	Metalworker	December 27, 2020: Aksum	
19	Esayas	M		Teacher	December 3, 2010: Aksum	
20	Teklayesus Abrha	M		Teacher	December 1, 2010, Aksum	
21	Leul	M		Metalworker	December10, 2010: Aksum	
22	Weldegebriel Weldekidan	M	26	Civil servant	December 26, 2010: Aksum	

23	Tewodross Abreham	M	32	Civil servant	December 21, 2010: Aksum	
24	Berhanemeskel Haile	M	32	Wood worker	Aksum	#
25	Behabelom	M	41	Metalworker	January 1, 2011: Aksum	*
26	Hayali	M	79	Farmer	December 3, 2010: Aksum	*
27	Hagos	M	28	Teacher	December 3, 4, 5, 2010: Aksum	*

*their name is changed for the purpose of the research
#those interviewed more than five days

Appendix B: Different Metallic Products

I. Different Pendant Crosses

II. Different Neck Jewelries

A. gʊbagʊb

B. t’ɨlsəm

C. t’ɨlsəm

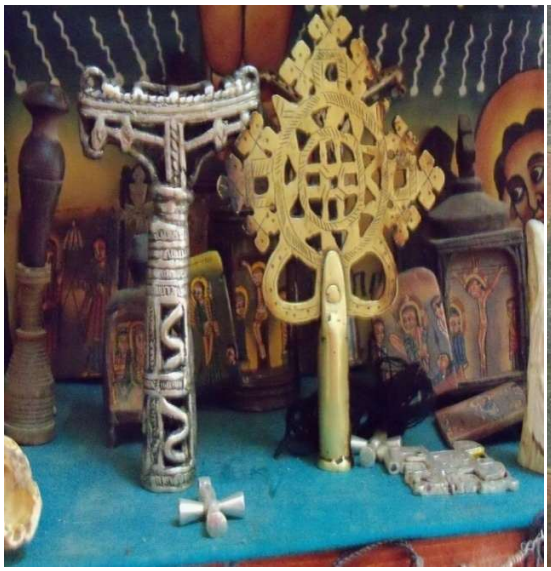
D. ħrkm

III. Other Metallic Products

A. məftuħ

B. mido

C. məsk’əln məṯhaziʔun



D. s’ənas’ɨn

Appendix C: Types of Crosses

I. Lalibela Cross

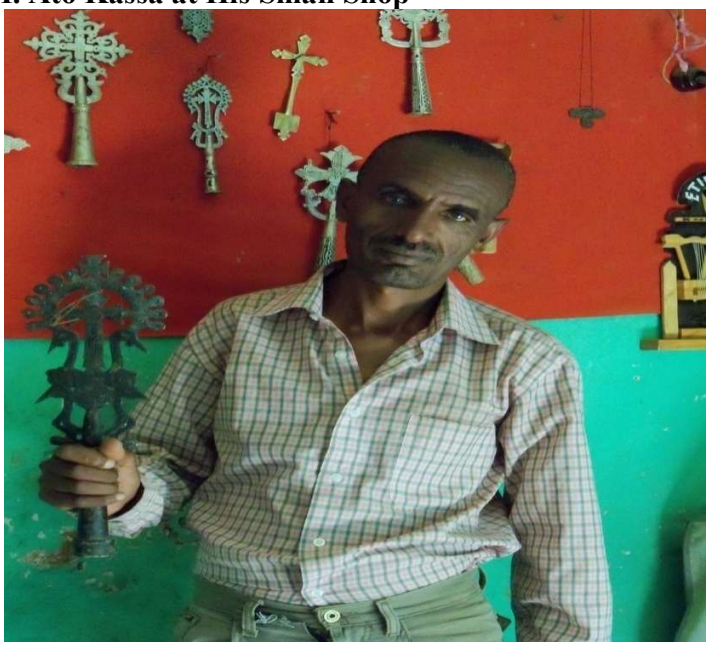
II. Aksumite Cross

III. Gonder Cross

Appendix D: Some of the Focus Group Discussant

Appendix E: Other Selected Picture

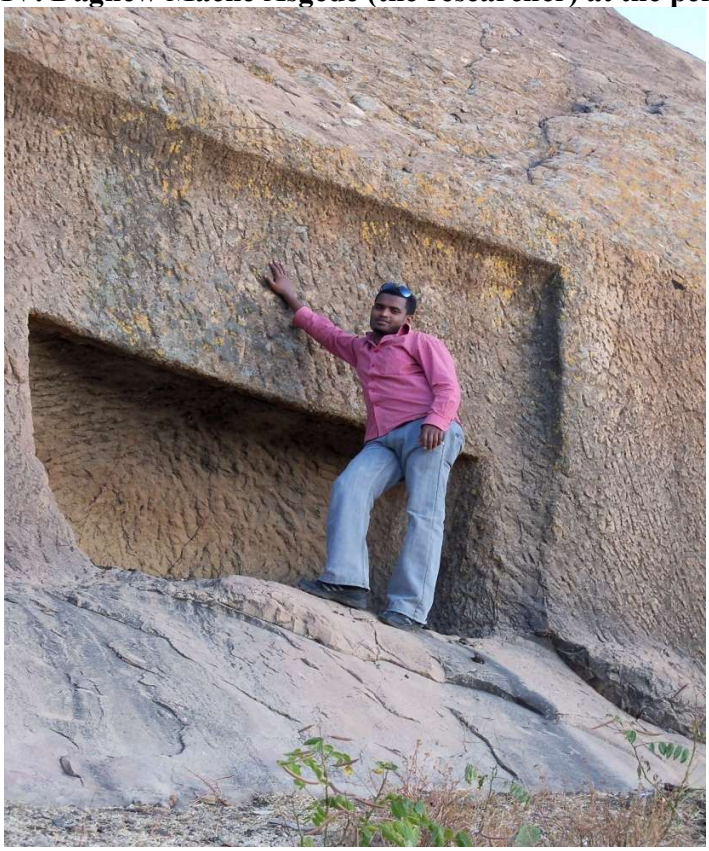
I. Ato Kassa at His Small Shop



II. Dagnew with Ato Kassa at Kassa's Shop

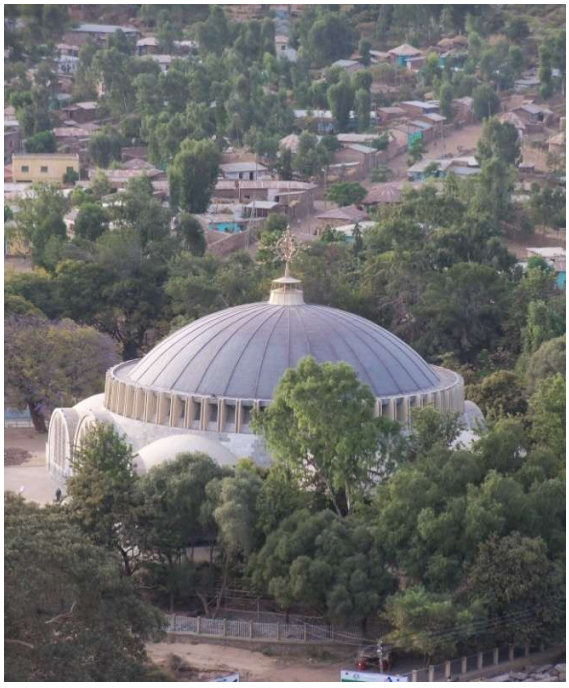
III. Dagnew Mache Asgede with Ato Brhane at Brhane's Shop

IV. Dagnew Mache Asgede (the researcher) at the perforated rock

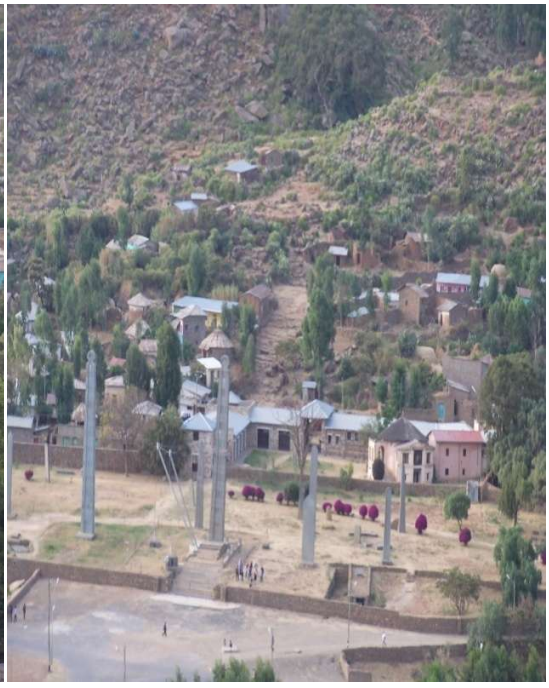


V. Some part of Aksum

A. The new Zion Church of Aksum

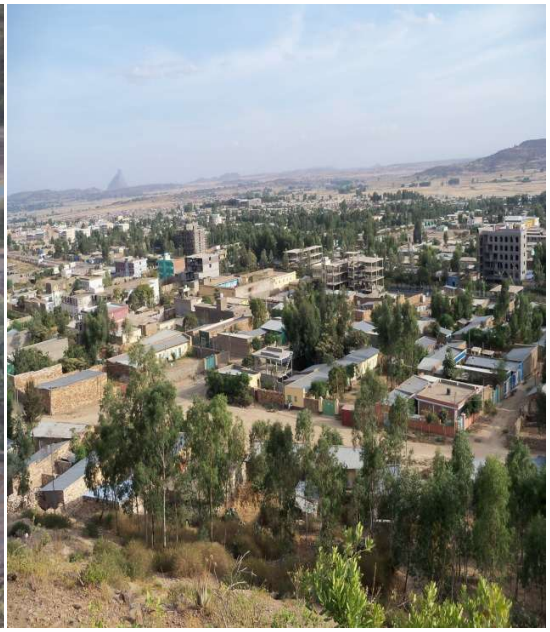


B. the obelisks of Aksum



C. the second old Zion Church of Aksum

D. Part of the town



Declaration

I, the undersigned, declared that this thesis is my own original work. To the best of my knowledge, it has not been presented for a degree in any university, and all sources of materials for this thesis has been duly acknowledged. The video, audio and pictures have been captured by the permission of all subjects of the study.

Name: _____

Signature: _____

Place: _____

Date of submission: _____

This thesis has been submitted for examination with our approval as university advisors.

_____ _____ _____

Name Signature Date

_____ _____ _____ (for the technology part)

Name Signature Date